

3

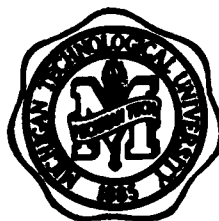
DTIC FILE COPY

DEVELOPMENT of a PREDICTIVE MODEL to
ASSESS the EFFECTS of EXTENDED SEASON
NAVIGATION on
GREAT LAKES CONNECTING WATERS

AD-A202 198

APPENDIX B

Observed Vessel Induced Water Level Drawdowns



DTIC
ELECTE
DEC 30 1988
S E D

Michigan Technological University
Houghton, Michigan
October 1985

This document has been approved
for public release and sales in
distribution is unlimited.

88 12 20 075

REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1a. REPORT SECURITY CLASSIFICATION Unclassified			1b. RESTRICTIVE MARKINGS			
2a. SECURITY CLASSIFICATION AUTHORITY			3. DISTRIBUTION/AVAILABILITY OF REPORT Approved for public release; distribution unlimited			
2b. DECLASSIFICATION/DOWNGRADING SCHEDULE						
4. PERFORMING ORGANIZATION REPORT NUMBER(S)			5. MONITORING ORGANIZATION REPORT NUMBER(S)			
6a. NAME OF PERFORMING ORGANIZATION Michigan Technological University		6b. OFFICE SYMBOL (If applicable)		7a. NAME OF MONITORING ORGANIZATION U.S. Army Cold Regions Research and Engineering Laboratory CRREL		
6c. ADDRESS (City, State, and ZIP Code) Michigan Technological University Houghton, MI 49931			7b. ADDRESS (City, State, and ZIP Code) 72 Lyme Road Hanover, NH 03755			
8a. NAME OF FUNDING/SPONSORING ORGANIZATION U.S. Army Corps of Engineers		8b. OFFICE SYMBOL (If applicable)		9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER NCE-1A-84-0127		
8c. ADDRESS (City, State, and ZIP Code) Detroit District P.O. Box 1027 Detroit, MI 48231			10. SOURCE OF FUNDING NUMBERS			
			PROGRAM ELEMENT NO.		PROJECT NO.	TASK NO.
					WORK UNIT ACCESSION NO.	
11. TITLE (Include Security Classification) Development of a Predictive Model to Assess the Effects of Extended Season Navigation on Great Lakes Connecting Waters, Appendix B, Observed Vessel						
12. PERSONAL AUTHOR(S) Hodek, R.J., G.R. Alger, and H.S. Santeford						
13a. TYPE OF REPORT Final		13b. TIME COVERED FROM _____ TO _____		14. DATE OF REPORT (Year, Month, Day) October 31, 1985		15. PAGE COUNT 521
16. SUPPLEMENTARY NOTATION						
17. COSATI CODES			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)			
FIELD	GROUP	SUB-GROUP	St. Marys River System, Computer Model, Winter Navigation, Sediment Translocation, Water Quality, Structure Damage, Hydraulic Changes			
19. ABSTRACT (Continue on reverse if necessary and identify by block number) The object of this study was to develop a method for forecasting the physical effects of the passage of commercial vessels through Great Lakes connecting waters during that period of time when traffic is normally at a minimum due to a more or less continuous ice cover. The physical impacts examined were sediment translocation, water quality effects, direct damage to existing structures, and changes in the gross hydraulic regime. Also associated with Appendix B but bound separately are; Development of a Predictive Model to Assess the Effects of Extended Season Navigation on Great Lakes Connecting Waters, Final Report; the User's Manual for Prediction of Vessel Impacts in a Confined Waterway; Appendix A, Site and Soil Conditions; and Appendix C, Observed Ice Thicknesses and Water Turbidities.						
20. DISTRIBUTION/AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT. <input type="checkbox"/> DTIC USERS				21. ABSTRACT SECURITY CLASSIFICATION Unclassified		
22a. NAME OF RESPONSIBLE INDIVIDUAL Thomas Freitag				22b. TELEPHONE (Include Area Code) (313) 226-7590		22c. OFFICE SYMBOL CENCE-PD-EA

11. (cont.) Induced Water Level Drawdowns

DEVELOPMENT OF A PREDICTIVE MODEL TO
ASSESS THE EFFECTS OF EXTENDED SEASON
NAVIGATION ON
GREAT LAKES CONNECTING WATERS

APPENDIX B
OBSERVED VESSEL INDUCED WATER LEVEL DRAWDOWNS

by Ralph J. Hodek
George R. Alger
Henry S. Santeford

Accession For	
NTIS GRA&I	<input checked="checked" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A-1	

Submitted to the U.S. Army Cold Regions
Research and Engineering Laboratory
in partial fulfillment of
Contract No. DACA89-85-k-0001



Michigan Technological University
Houghton, Michigan

October 31, 1985

This appendix contains the field measurements of short-term water surface changes at several sites along the St. Mary's River caused by passage of commercial vessels. All monitored passages during this contract period (10/84 to 10/85) are included. Additional measurements from the authors' files and previous reports are also included.

The appendix is organized by site name and by date of observation. The locations and characteristics of the various sites can be found in Appendix A, Site and Soil Conditions. *(F-1)*

For most observations the data are presented in both tabular and graphical form. Vessel draft and speed were by observation and vessel dimensions are from published sources or as supplied by U.S. Coast Guard Soo Control. "Bow on time" and "stern on time" are the times after the beginning of data-taking that the vessel's bow and stern crossed the range which transects the river. The "green side" and "red side" referred to, locate the near-shore locations at which measurements were made. Facing upstream the red side is to the right and the green side is to the observer's or vessel's left. The "background reading" refers to the staff gage reading prior to the effects of the approaching vessel.

RIVER VIEW

DRAWDOWN DATA

NAME OF SECTION RIVER VIEW

DATE OF OBSERVATION 4/19/79

VESSEL NAME JOHN G. MUNSON

DIRECTION UPBOUND

VESSEL LENGTH in feet = 768

VESSEL BEAM in feet = 72

VESSEL DRAFT in feet = 24

VESSEL SPEED in feet/sec. = 9.7

BOW ON TIME in sec = 118

STERN ON TIME in sec = 197

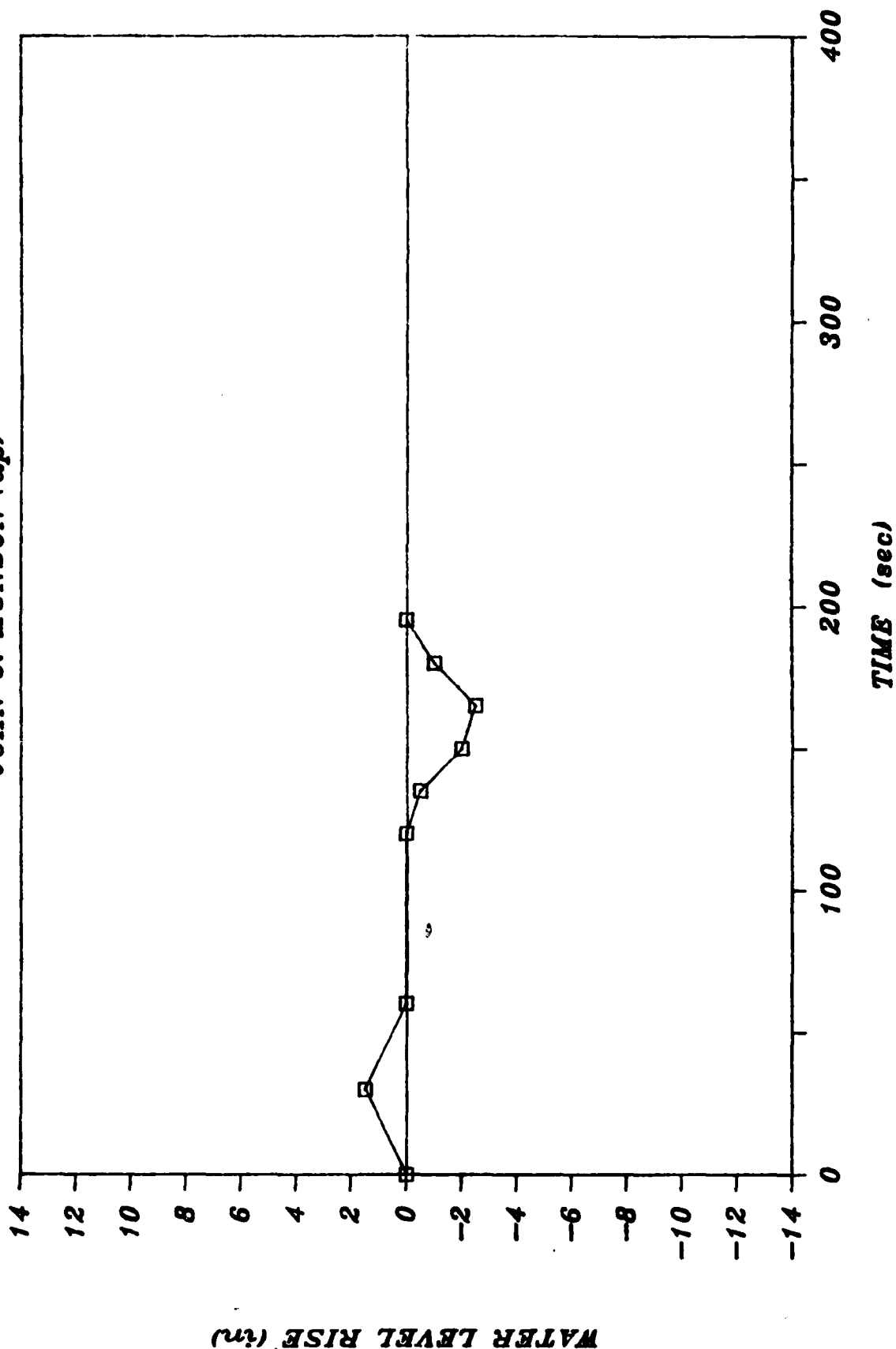
DISTANCE TO STAFF GAUGE from green side in feet = 88

BACKGROUND READING in inches = 12

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	12.0	0.0
2	30.0	13.5	1.5
3	60.0	12.0	0.0
4	120.0	12.0	0.0
5	135.0	11.5	-0.5
6	150.0	10.0	-2.0
7	165.0	9.5	-2.5
8	180.0	11.0	-1.0
9	195.0	12.0	0.0

RIVER VIEW 4/19/79

JOHN G. MUNSON (up)



DRAWDOWN DATA

NAME OF SECTION RIVER VIEW

DATE OF OBSERVATION 4/19/79

VESSEL NAME PHILLIP D. BLOCK

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 672

VESSEL BEAM in feet = 60

VESSEL DRAFT in feet = 25

VESSEL SPEED in feet/sec. = 15.1

BOW ON TIME in sec = 32.5

STERN ON TIME in sec = 77

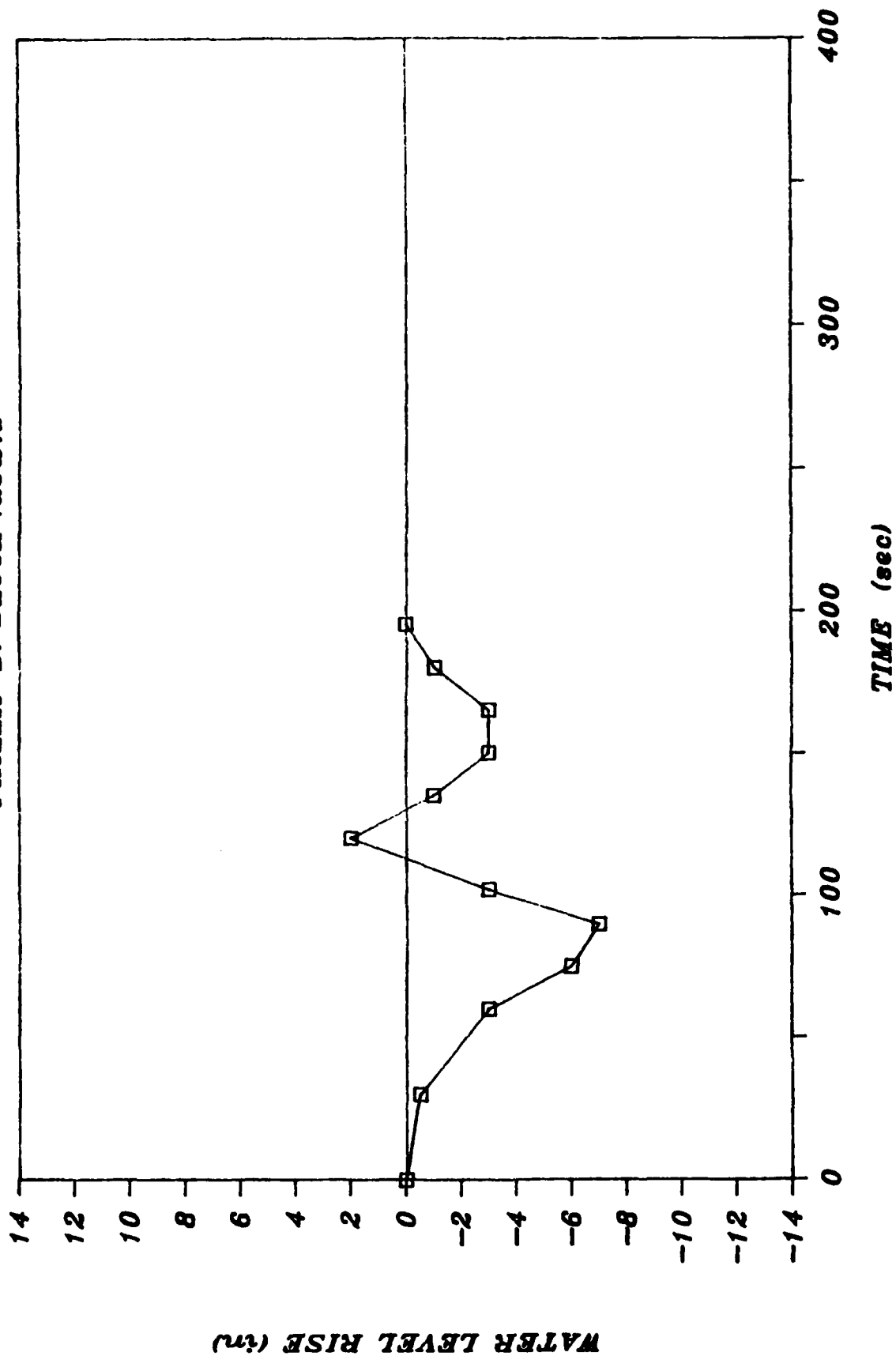
DISTANCE TO STAFF GAUGE from green side in feet = 88

BACKGROUND READING in inches = 12

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	12.0	0.0
2	30.0	11.5	-0.5
3	60.0	9.0	-3.0
4	75.0	6.0	-6.0
5	90.0	5.0	-7.0
6	102.0	9.0	-3.0
7	120.0	14.0	2.0
8	135.0	11.0	-1.0
9	150.0	9.0	-3.0
10	165.0	9.0	-3.0
11	180.0	11.0	-1.0
12	195.0	12.0	0.0

RIVER VIEW 4/19/79

PHILLIP D. BLOCK (down)



DRAWDOWN DATA

NAME OF SECTION RIVER VIEW

DATE OF OBSERVATION 4/19/79

VESSEL NAME STEWART J. CORT

DIRECTION UPBOUND

VESSEL LENGTH in feet = 1000

VESSEL BEAM in feet = 105

VESSEL DRAFT in feet = 21

VESSEL SPEED in feet/sec. = 9.9

BOW ON TIME in sec = 125

STERN ON TIME in sec = 226

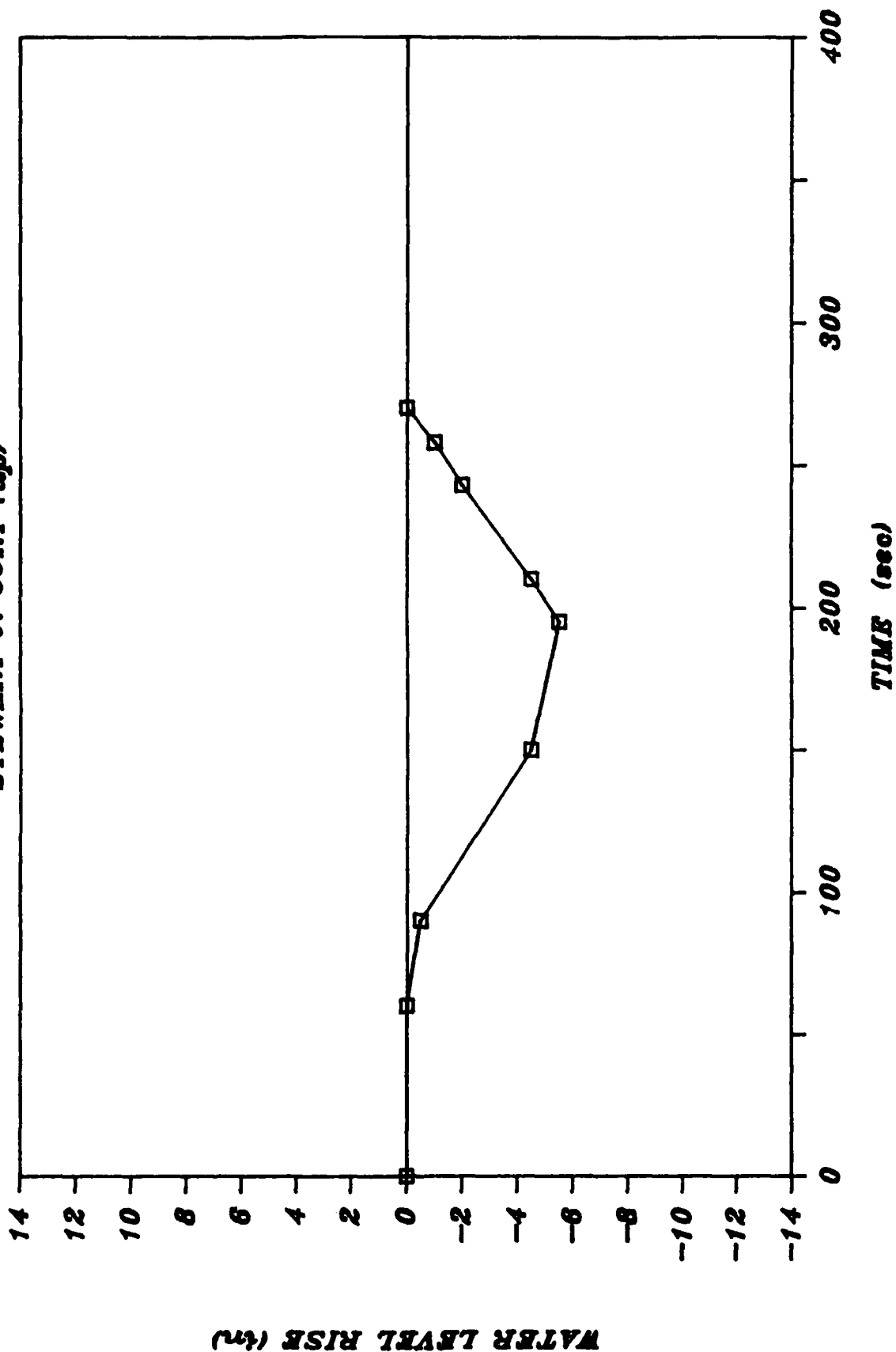
DISTANCE TO STAFF GAUGE from green side in feet = 88

BACKGROUND READING in inches = 12

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	12.0	0.0
2	60.0	12.0	0.0
3	90.0	11.5	-0.5
4	150.0	7.5	-4.5
5	195.0	6.5	-5.5
6	210.0	7.5	-4.5
7	243.0	10.0	-2.0
8	258.0	11.0	-1.0
9	270.0	12.0	0.0

RIVER VIEW 4/19/79

STEWART J. CORT (wp)



 DRAWDOWN DATA

NAME OF SECTION RIVER VIEW

DATE OF OBSERVATION 11/9/84

VESSEL NAME EDWIN H. GOTT

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 1000

VESSEL BEAM in feet = 105

VESSEL DRAFT in feet = 28

VESSEL SPEED in feet/sec. = 11.9

BOW ON TIME in sec = 70

STERN ON TIME in sec = 154

DISTANCE TO STAFF GAUGE from green side in feet = 42

BACKGROUND READING in inches = 21.2

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	21.3	0.0
2	16.0	21.3	0.0
3	28.0	21.0	-0.2
4	31.0	20.5	-0.7
5	37.0	20.3	-1.0
6	40.0	20.0	-1.2
7	43.0	19.8	-1.5
8	48.0	19.5	-1.7
9	50.0	19.0	-2.2
10	54.0	18.5	-2.7
11	58.0	18.3	-3.0
12	61.0	18.0	-3.2
13	68.0	17.8	-3.5
14	74.0	17.0	-4.2
15	77.0	16.5	-4.7
16	82.0	16.3	-5.0
17	85.0	16.0	-5.2
18	90.0	15.8	-5.5
19	104.0	14.8	-6.5
20	110.0	14.5	-6.7

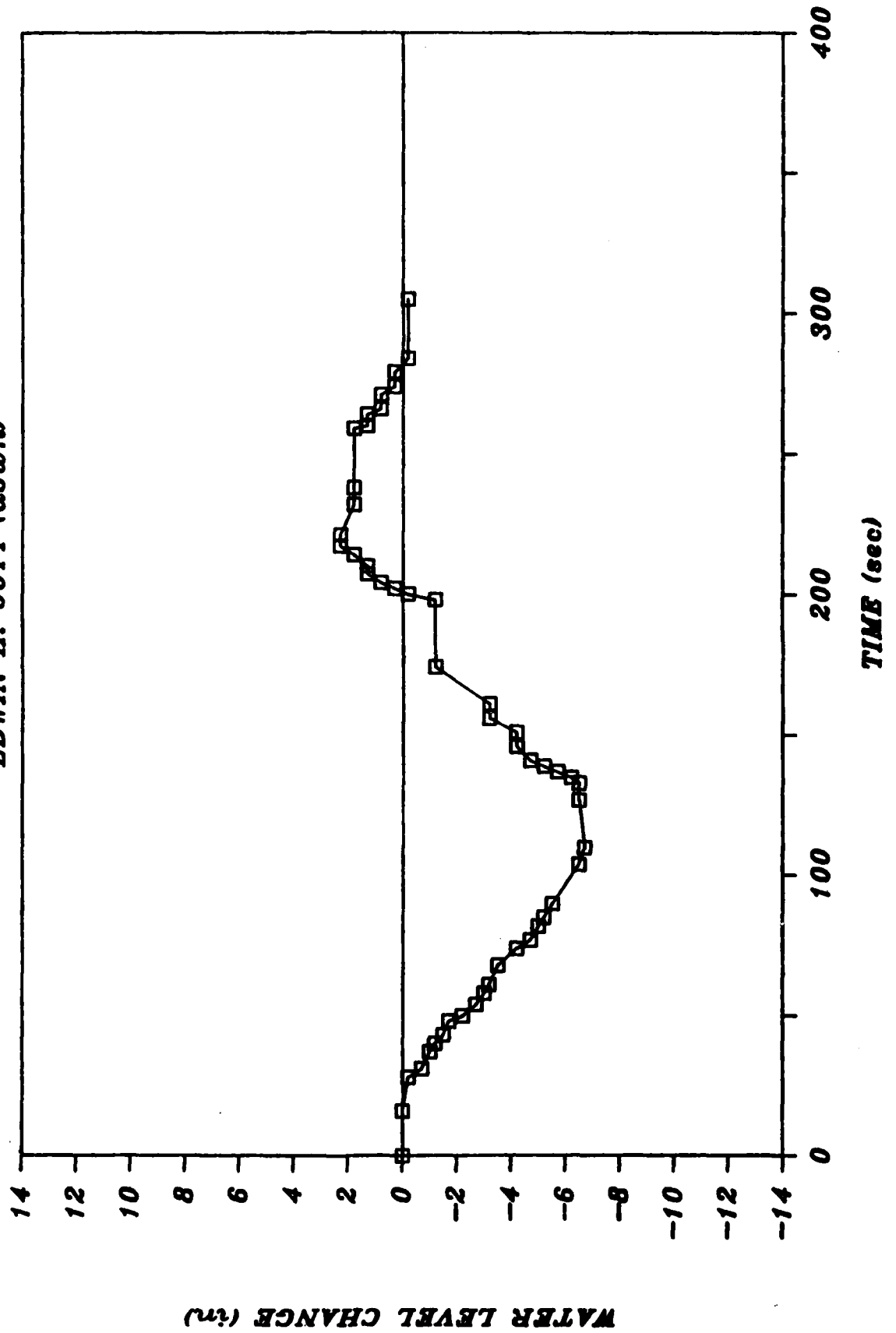
DRAWDOWN DATA (continued)

NAME OF SECTION RIVER VIEW

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	127.0	14.8	-6.5
22	133.0	14.8	-6.5
23	135.0	15.0	-6.2
24	137.0	15.5	-5.7
25	139.0	16.0	-5.2
26	141.0	16.5	-4.7
27	146.0	17.0	-4.2
28	151.0	17.0	-4.2
29	156.0	18.0	-3.2
30	161.0	18.0	-3.2
31	174.0	20.0	-1.2
32	198.0	20.0	-1.2
33	200.0	21.0	-0.2
34	202.0	21.5	0.3
35	204.0	22.0	0.8
36	207.0	22.5	1.3
37	210.0	22.5	1.3
38	214.0	23.0	1.8
39	217.0	23.5	2.3
40	221.0	23.5	2.3
41	232.0	22.0	0.8
42	238.0	23.0	1.8
43	259.0	23.0	1.8
44	260.0	22.5	1.3
45	264.0	22.5	1.3
46	266.0	22.0	0.8
47	271.0	22.0	0.8
48	274.0	21.5	0.3
49	279.0	21.5	0.3
50	284.0	21.0	-0.2
51	305.0	21.0	-0.2

RIVER VIEW 11/9/84

EDWIN H. GOTT (down)



#####

DRAWDOWN DATA

NAME OF SECTION RIVER VIEW

#####

DATE OF OBSERVATION 11/9/84

VESSEL NAME ONTADOC

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 355

VESSEL BEAM in feet = 49

VESSEL DRAFT in feet = 24

VESSEL SPEED in feet/sec. = 5.8

BOW ON TIME in sec = 89

STERN ON TIME in sec = 150

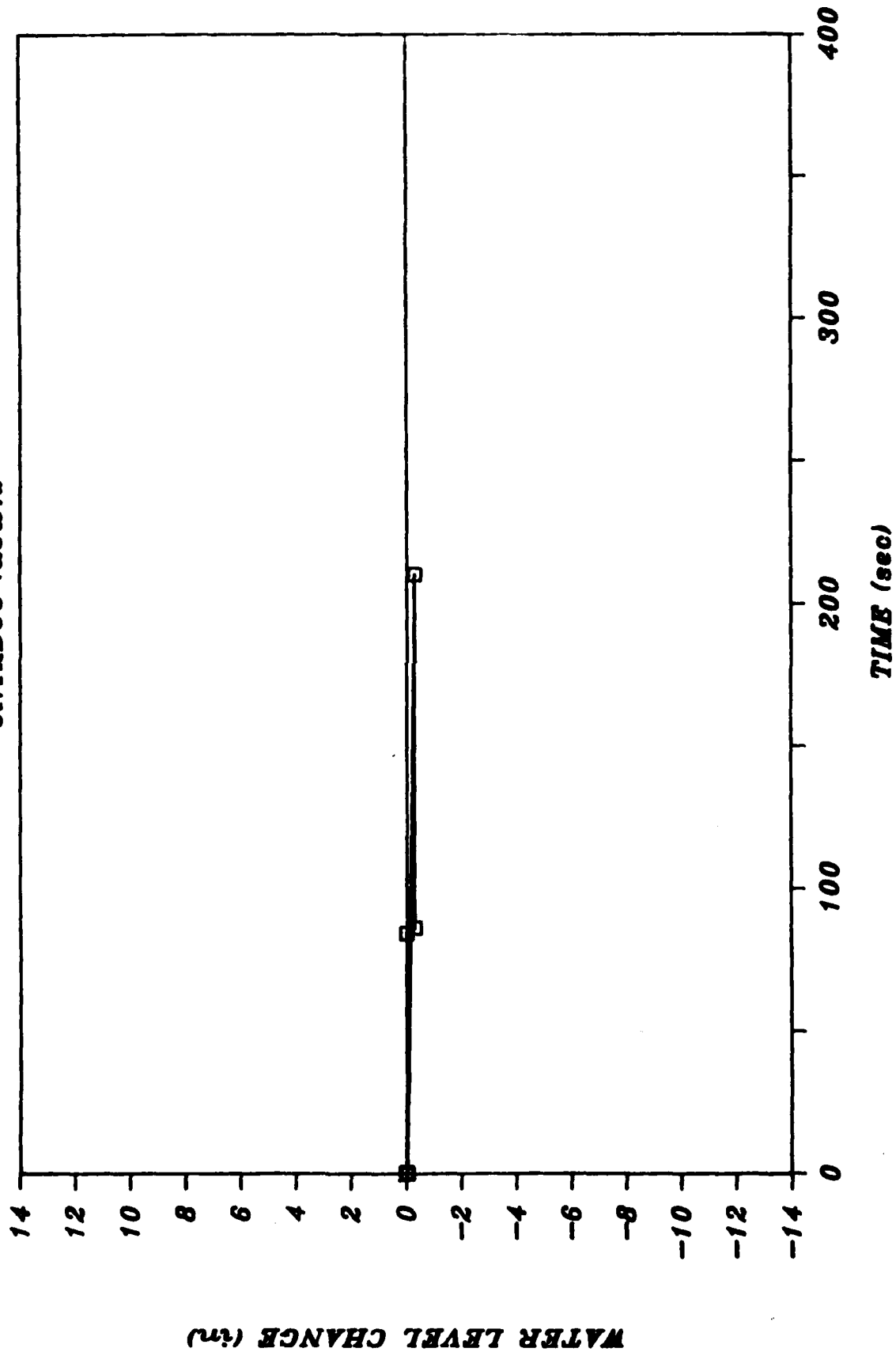
DISTANCE TO STAFF GAUGE from green side in feet = 42

BACKGROUND READING in inches = 21.3

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	21.3	-0.0
2	84.0	21.3	-0.0
3	86.0	21.0	-0.3
4	88.0	21.0	-0.3
5	91.0	21.0	-0.3
6	149.0	21.0	-0.3
7	152.0	21.0	-0.3
8	210.0	21.0	-0.3

RIVER VIEW 11/9/84

ONTADOC (down)



DRAWDOWN DATA

NAME OF SECTION RIVER VIEW
#####

DATE OF OBSERVATION 11/9/84

VESSEL NAME ONTADOC

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 355

VESSEL BEAM in feet = 49

VESSEL DRAFT in feet = 24

VESSEL SPEED in feet/sec. = 5.8

BOW ON TIME in sec = 89

STERN ON TIME in sec = 150

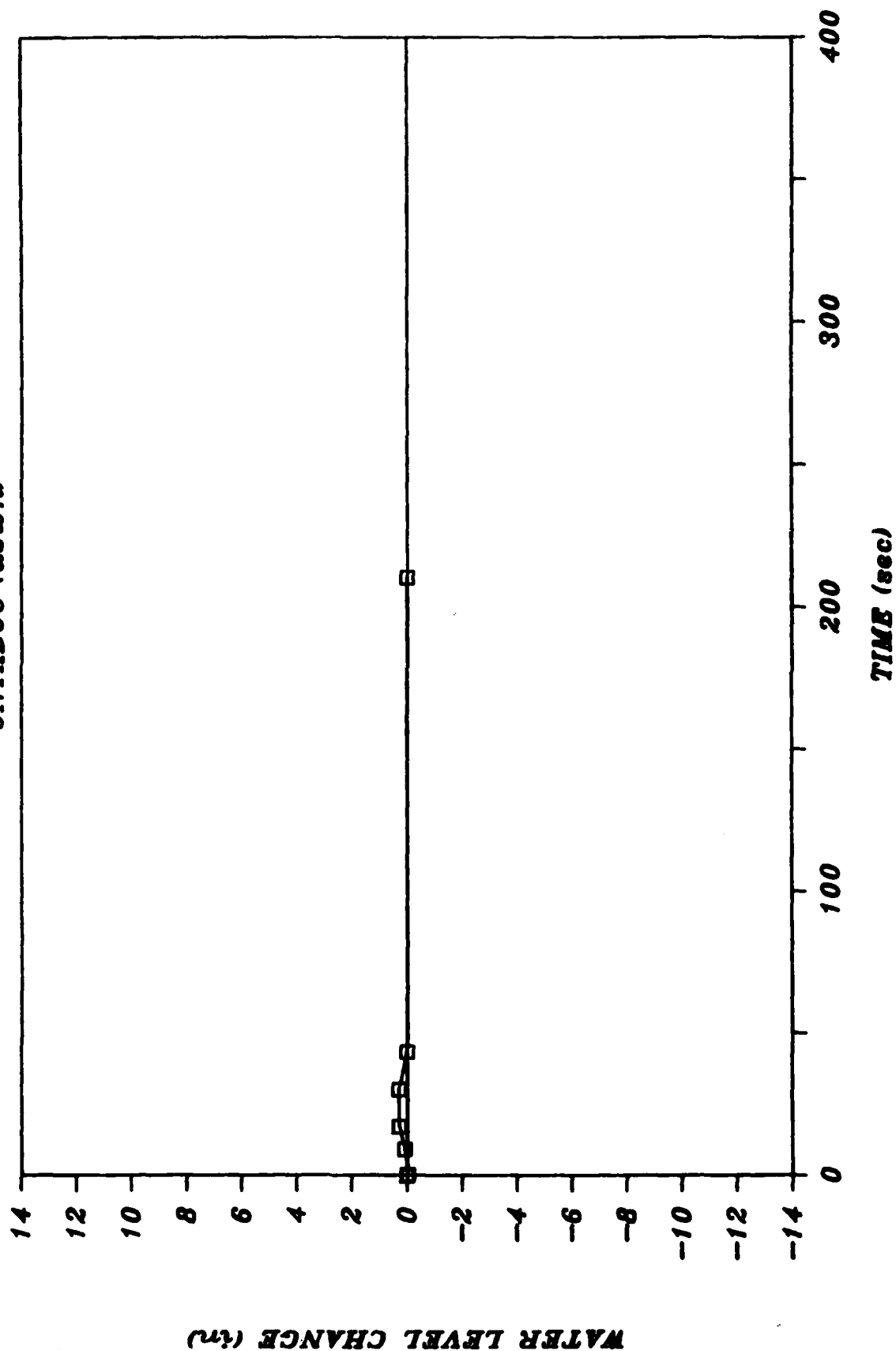
DISTANCE TO STAFF GAUGE from green side in feet = 1750

BACKGROUND READING in inches = 14.5

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	14.5	0.0
2	9.0	14.6	0.1
3	17.0	14.8	0.3
4	30.0	14.8	0.3
5	43.0	14.5	0.0
6	88.0	14.5	0.0
7	99.0	14.5	0.0
8	149.0	14.5	0.0
9	154.0	14.5	0.0
10	210.0	14.5	0.0

RIVER VIEW 11/9/84

ONTADOC (down)



#####

DRAWDOWN DATA

NAME OF SECTION RIVER VIEW

#####

DATE OF OBSERVATION 11/9/84

VESSEL NAME ONTADOC

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 355

VESSEL BEAM in feet = 49

VESSEL DRAFT in feet = 24

VESSEL SPEED in feet/sec. = 5.8

BOW ON TIME in sec = 89

STERN ON TIME in sec = 150

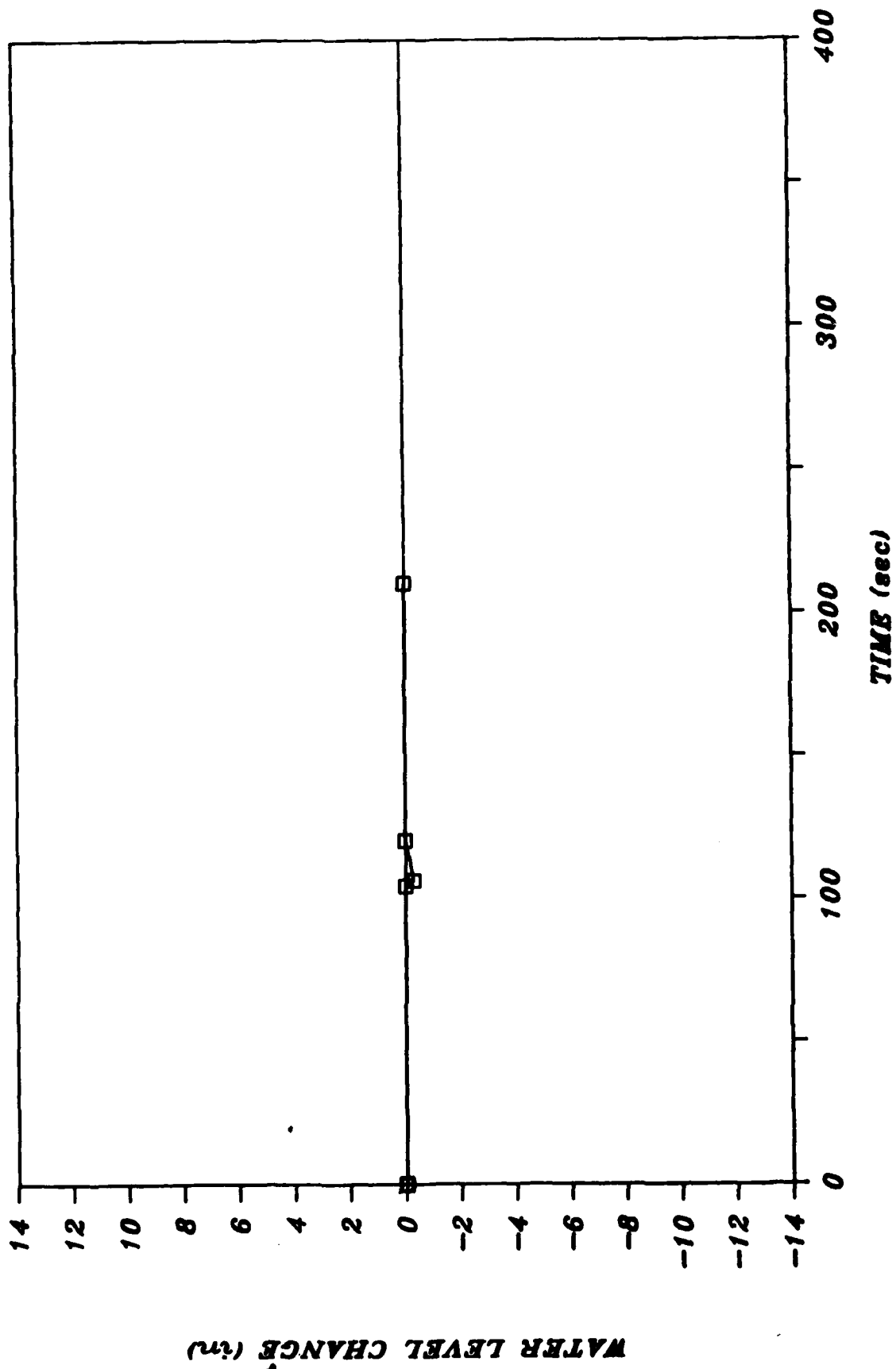
DISTANCE TO STAFF GAUGE from green side in feet = 1800

BACKGROUND READING in inches = 12

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	12.0	0.0
2	88.0	12.0	0.0
3	104.0	12.0	0.0
4	106.0	11.8	-0.3
5	120.0	12.0	0.0
6	149.0	12.0	0.0
7	152.0	12.0	0.0
8	210.0	12.0	0.0

RIVER VIEW 11/9/84

ONTADOC (down)



DRAWDOWN DATA

NAME OF SECTION RIVER VIEW
#####

DATE OF OBSERVATION 11/9/84

VESSEL NAME BEECHGLEN

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 680

VESSEL BEAM in feet = 60

VESSEL DRAFT in feet = 26

VESSEL SPEED in feet/sec. = 6.7

BOW ON TIME in sec = 83

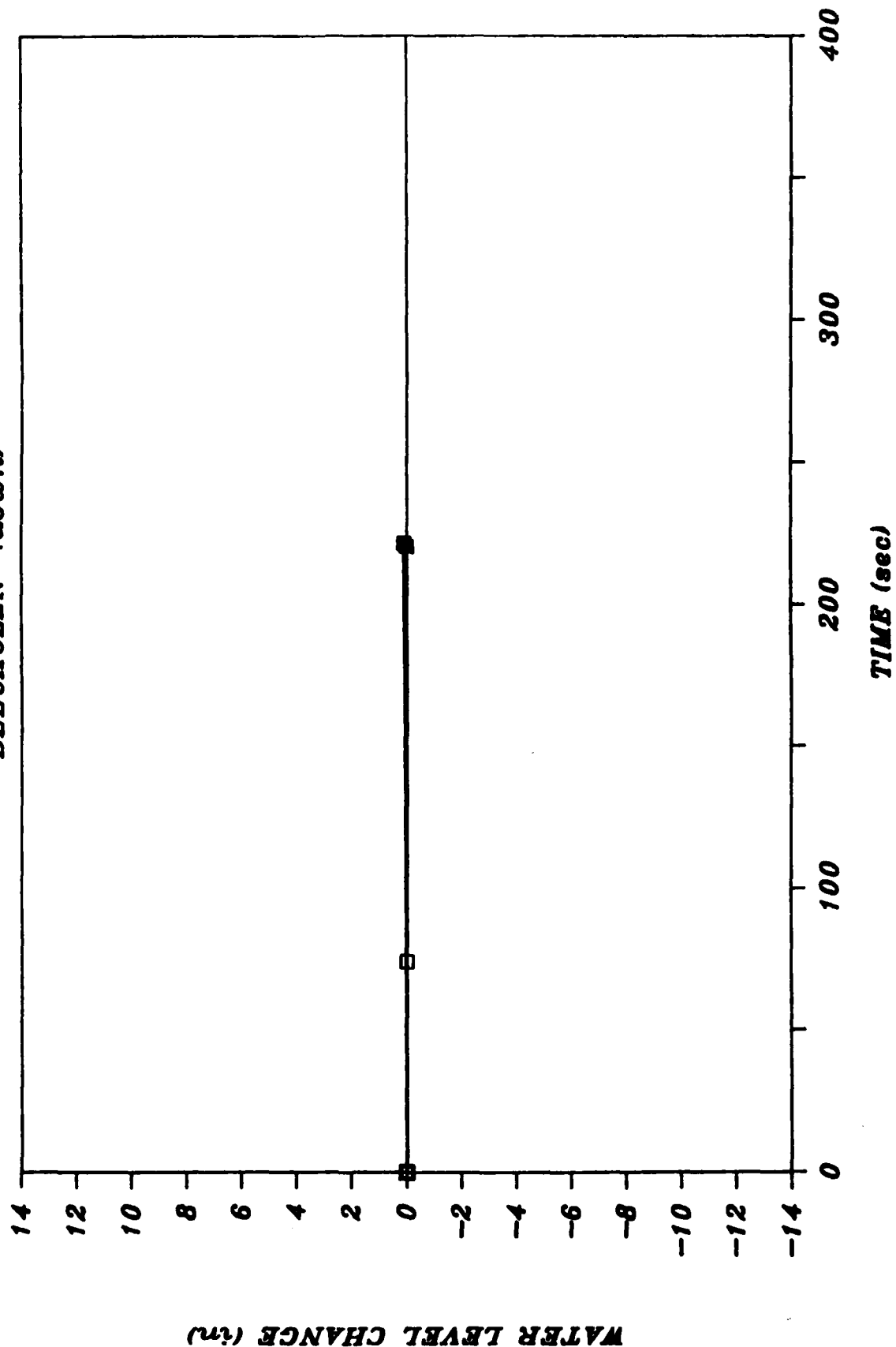
STERN ON TIME in sec = 184

DISTANCE TO STAFF GAUGE from green side in feet = 42

BACKGROUND READING in inches = 20.9

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	20.9	-0.0
2	74.0	20.9	-0.0
3	87.0	20.9	-0.0
4	177.0	20.9	-0.0
5	196.0	20.9	-0.0
6	220.0	20.9	-0.0
7	221.0	21.0	0.1

RIVER VIEW 11/9/84
BEECHGLEN (down)



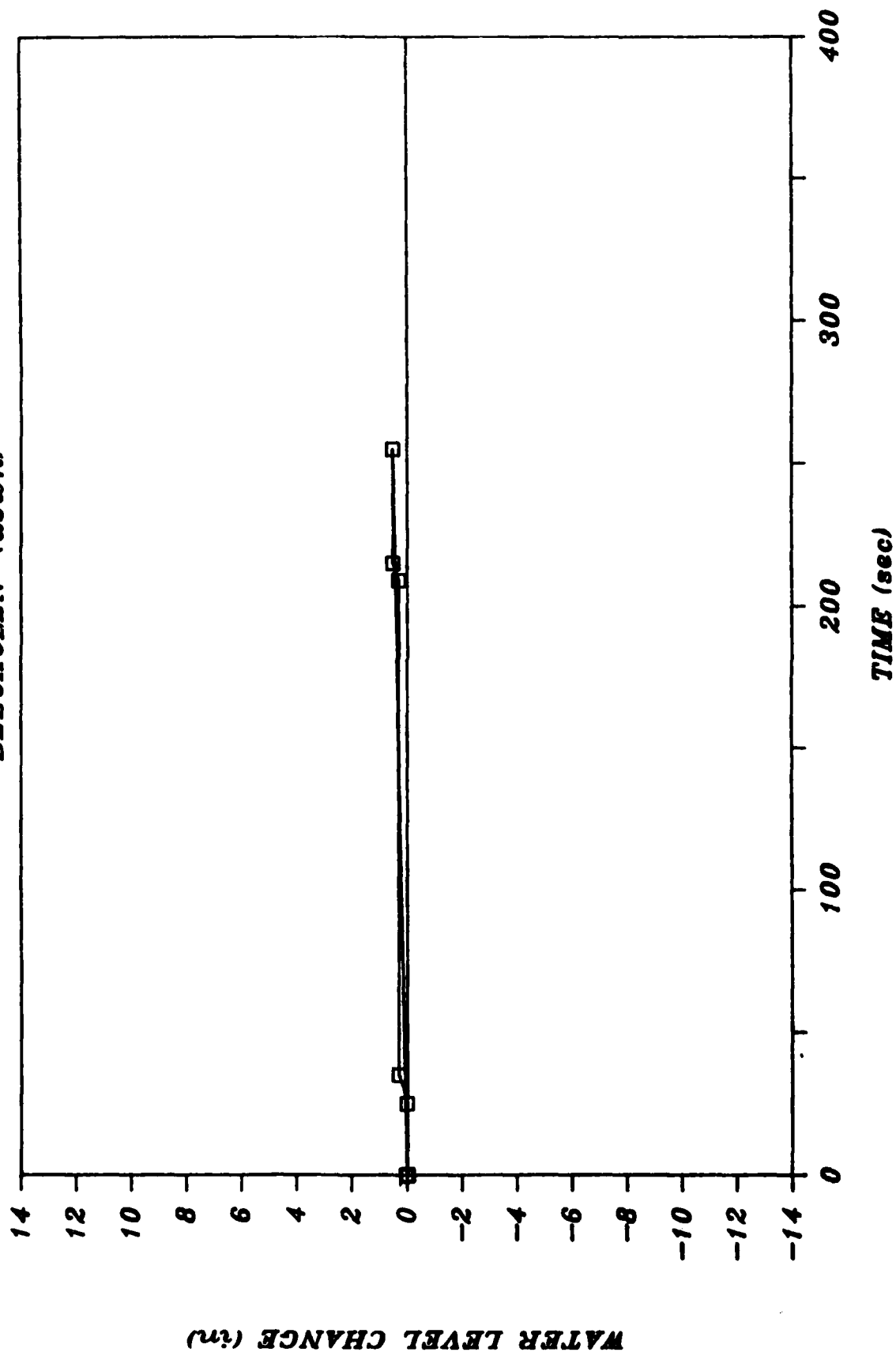
[illegible]

BACKGROUND READING in inches = 14

BA18

RIVER VIEW 11/9/84

BEECHGLEN (down)



DRAWDOWN DATA

NAME OF SECTION RIVER VIEW
#####

DATE OF OBSERVATION 11/9/84

VESSEL NAME BEECHGLEN

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 680

VESSEL BEAM in feet = 60

VESSEL DRAFT in feet = 26

VESSEL SPEED in feet/sec. = 6.7

BOW ON TIME in sec = 83

STERN ON TIME in sec = 184

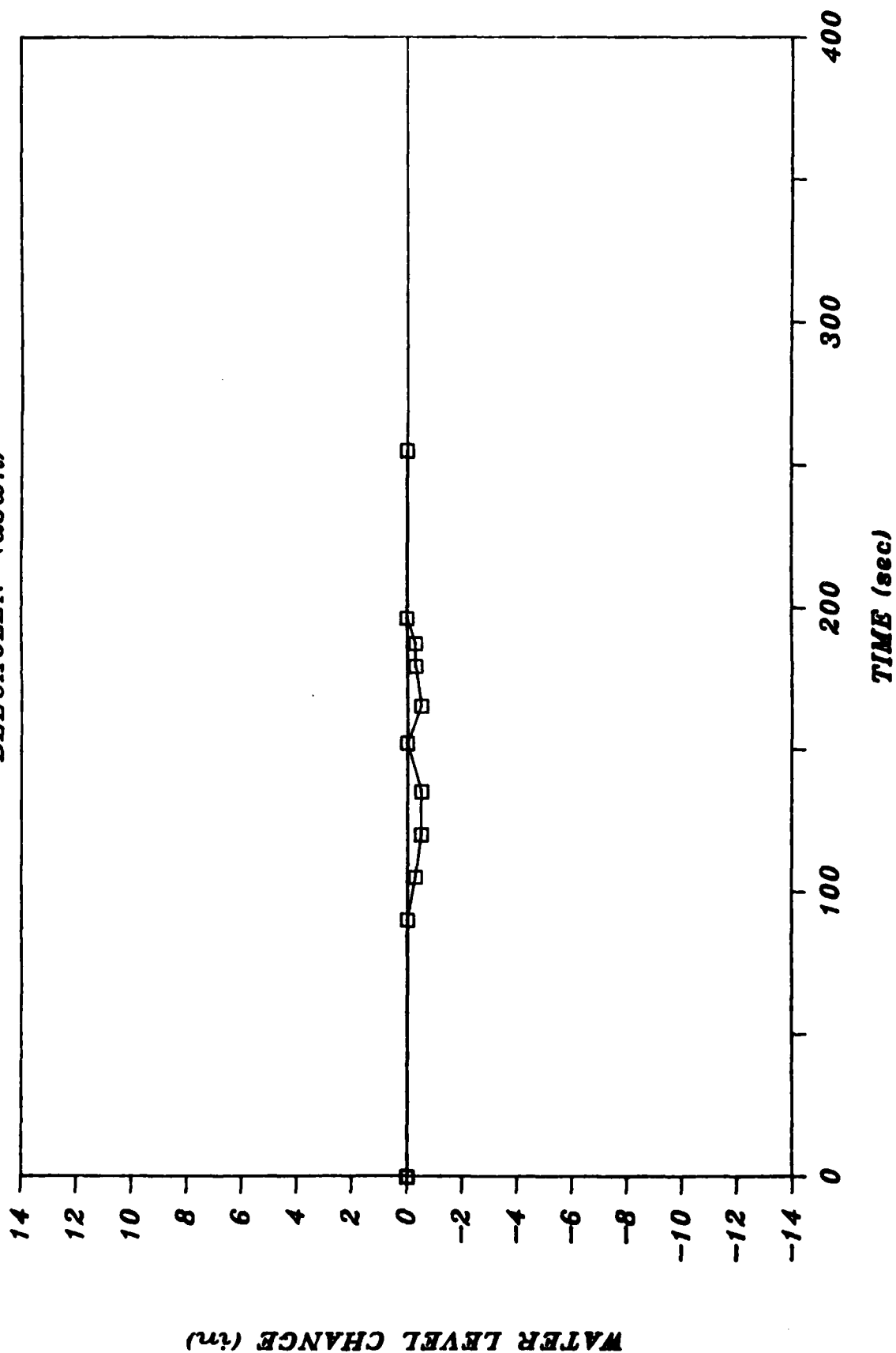
DISTANCE TO STAFF GAUGE from green side in feet = 1800

BACKGROUND READING in inches = 12

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	12.0	0.0
2	76.0	12.0	0.0
3	90.0	12.0	0.0
4	105.0	11.8	-0.3
5	120.0	11.5	-0.5
6	135.0	11.5	-0.5
7	152.0	12.0	0.0
8	165.0	11.5	-0.5
9	179.0	11.8	-0.3
10	187.0	11.8	-0.3
11	196.0	12.0	0.0
12	255.0	12.0	0.0

RIVER VIEW 11/9/84

BEECHGLEN (down)



 DRAWDOWN DATA

NAME OF SECTION RIVER VIEW
 #####

DATE OF OBSERVATION 11/9/84

VESSEL NAME ELMGLEN

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 604

VESSEL BEAM in feet = 60

VESSEL DRAFT in feet = 25

VESSEL SPEED in feet/sec. = 8.4

BOW ON TIME in sec = 82

STERN ON TIME in sec = 154

DISTANCE TO STAFF GAUGE from green side in feet = 42

BACKGROUND READING in inches = 23

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	23.0	0.0
2	7.0	22.5	-0.5
3	11.0	22.5	-0.5
4	16.0	22.0	-1.0
5	37.0	22.0	-1.0
6	46.0	22.5	-0.5
7	68.0	22.5	-0.5
8	76.0	22.0	-1.0
9	79.0	22.0	-1.0
10	85.0	21.5	-1.5
11	107.0	21.5	-1.5
12	112.0	22.0	-1.0
13	126.0	22.0	-1.0
14	131.0	21.5	-1.5
15	145.0	21.5	-1.5
16	155.0	22.0	-1.0
17	162.0	22.0	-1.0
18	166.0	22.5	-0.5
19	170.0	22.5	-0.5
20	175.0	23.0	0.0

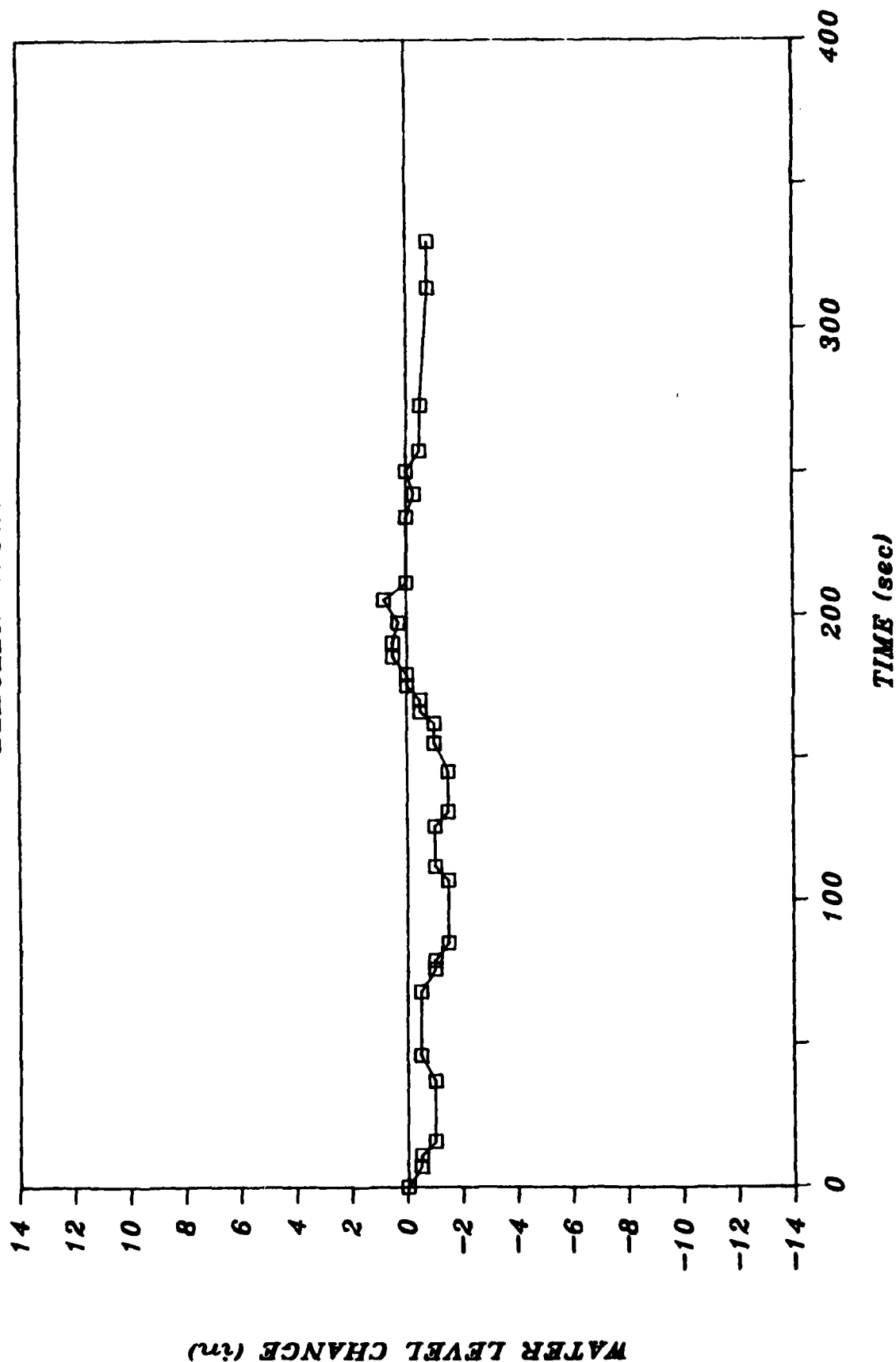
DRAWDOWN DATA (continued)

NAME OF SECTION RIVER VIEW

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	179.0	23.0	0.0
22	185.0	23.5	0.5
23	190.0	23.5	0.5
24	197.0	23.3	0.3
25	205.0	23.8	0.8
26	211.0	23.0	0.0
27	234.0	23.0	0.0
28	242.0	22.8	-0.3
29	250.0	23.0	0.0
30	257.0	22.5	-0.5
31	273.0	22.5	-0.5
32	314.0	22.3	-0.8
33	330.0	22.3	-0.8

RIVER VIEW 11/9/84

ELMCLEN (down)



NAME OF SECTION	RIVER VIEW
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

00

VESSEL NAME **ELMGLN**

VESSEL LENGTH in feet = 604

VESSEL BEAM in foot = 60

VESSEL DRAFT in foot = 25

VESSEL SPEED in foot/sec. = 8.4

BOW ON TIME in sec = 82

STERN ON TIME in sec = 154

DISTANCE TO STAFF GAUGE from green side in feet = 1750

BACKGROUND READING in inches = 16

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	16.0	0.0
2	17.0	16.0	0.0
3	20.0	15.5	-0.5
4	21.0	16.0	0.0
5	28.0	15.5	-0.5
6	30.0	16.0	0.0
7	35.0	15.5	-0.5
8	43.0	16.0	0.0
9	50.0	15.5	-0.5
10	56.0	15.5	-0.5
11	64.0	15.0	-1.0
12	107.0	15.0	-1.0
13	116.0	14.8	-1.3
14	129.0	14.8	-1.3
15	132.0	15.0	-1.0
16	137.0	15.5	-0.5
17	140.0	15.5	-0.5
18	143.0	16.0	0.0
19	146.0	16.0	0.0
20	148.0	16.5	0.5

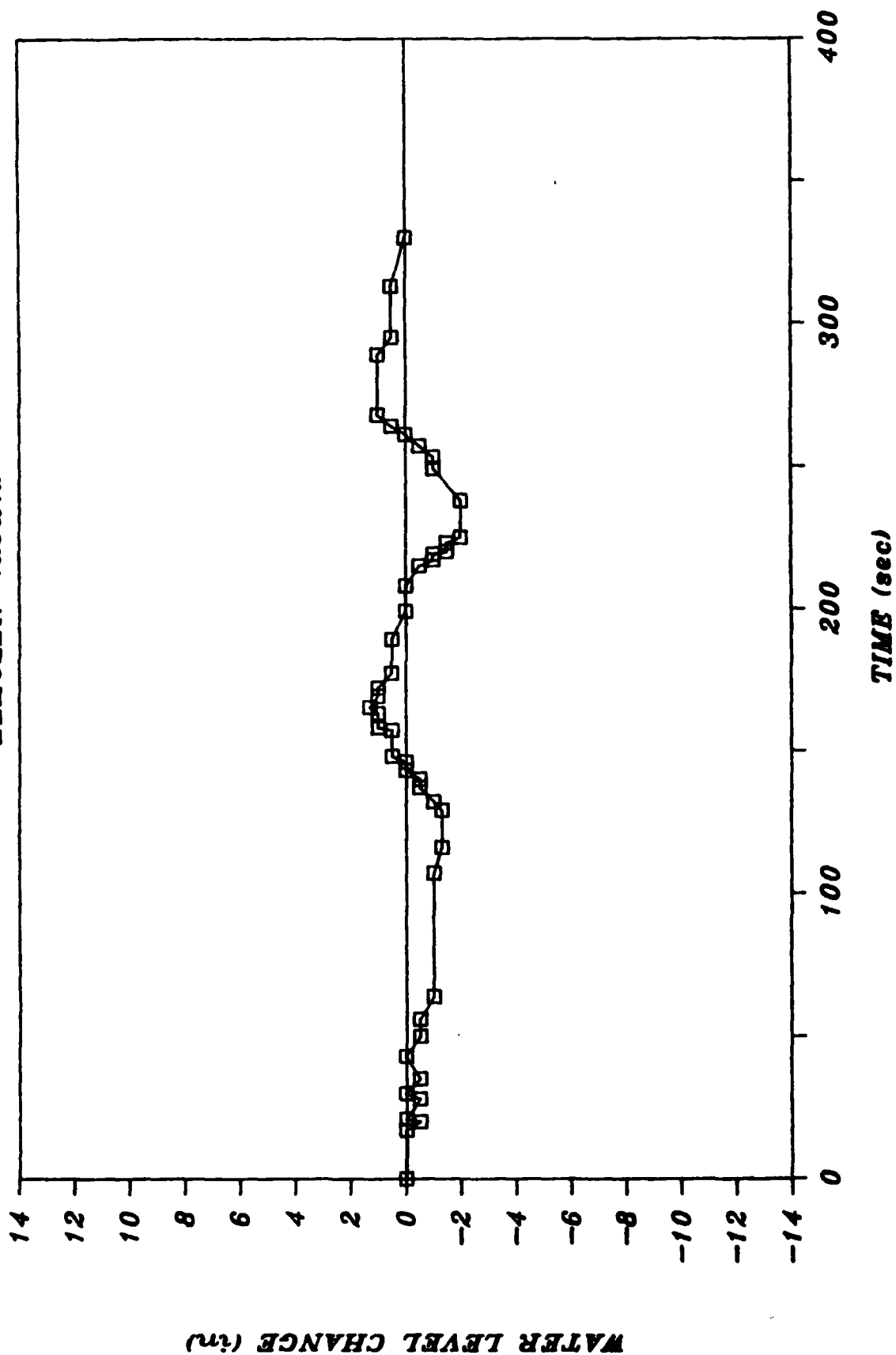
DRAWDOWN DATA (continued)

NAME OF SECTION RIVER VIEW

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	157.0	16.5	0.5
22	158.0	17.0	1.0
23	163.0	17.0	1.0
24	165.0	17.3	1.3
25	169.0	17.0	1.0
26	172.0	17.0	1.0
27	177.0	16.5	0.5
28	189.0	16.5	0.5
29	199.0	16.0	0.0
30	208.0	16.0	0.0
31	215.0	15.5	-0.5
32	217.0	15.0	-1.0
33	219.0	15.0	-1.0
34	220.0	14.5	-1.5
35	223.0	14.5	-1.5
36	225.0	14.0	-2.0
37	238.0	14.0	-2.0
38	249.0	15.0	-1.0
39	253.0	15.0	-1.0
40	257.0	15.5	-0.5
41	261.0	16.0	0.0
42	264.0	16.5	0.5
43	268.0	17.0	1.0
44	289.0	17.0	1.0
45	295.0	16.5	0.5
46	313.0	16.5	0.5
47	330.0	16.0	0.0

RIVER VIEW 11/9/84

ELMCLEN (down)



DRAWDOWN DATA

NAME OF SECTION RIVER VIEW

DATE OF OBSERVATION 11/9/84

VESSEL NAME ELNGLEN

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 604

VESSEL BEAM in feet = 60

VESSEL DRAFT in feet = 25

VESSEL SPEED in feet/sec. = 8.4

BOW ON TIME in sec = 82

STERN ON TIME in sec = 154

DISTANCE TO STAFF GAUGE from green side in feet = 1800

BACKGROUND READING in inches = 14

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	14.0	0.0
2	6.0	14.0	0.0
3	13.0	13.5	-0.5
4	44.0	13.5	-0.5
5	52.0	13.0	-1.0
6	62.0	13.0	-1.0
7	77.0	12.5	-1.5
8	90.0	12.0	-2.0
9	92.0	12.0	-2.0
10	95.0	12.5	-1.5
11	107.0	12.5	-1.5
12	115.0	13.0	-1.0
13	118.0	12.5	-1.5
14	122.0	12.5	-1.5
15	127.0	12.0	-2.0
16	132.0	12.5	-1.5
17	132.0	12.5	-1.5
18	136.0	13.0	-1.0
19	140.0	13.5	-0.5
20	144.0	14.0	0.0

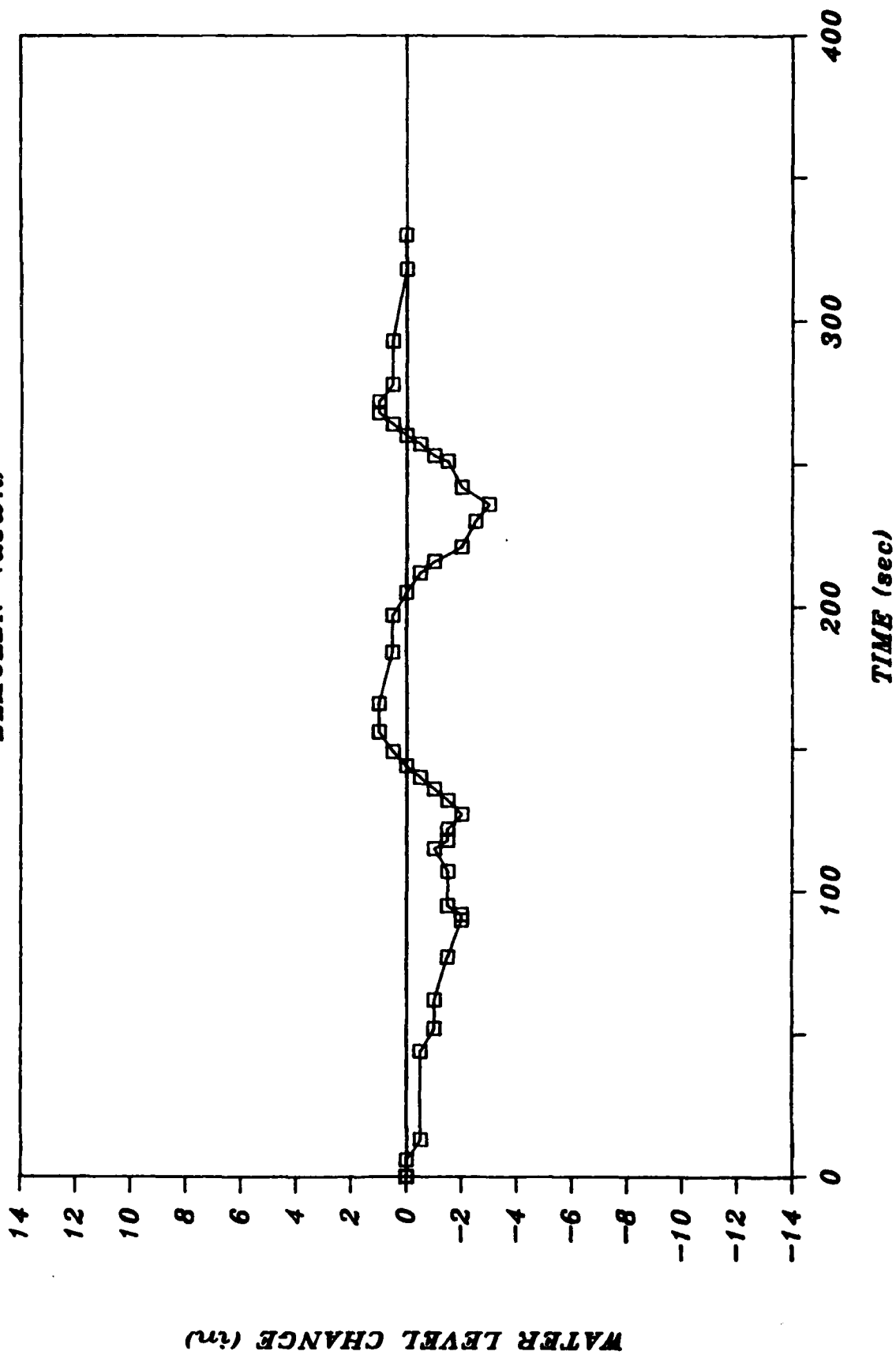
DRAWDOWN DATA (continued)

NAME OF SECTION RIVER VIEW

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	149.0	14.5	0.5
22	156.0	15.0	1.0
23	166.0	15.0	1.0
24	184.0	14.5	0.5
25	197.0	14.5	0.5
26	205.0	14.0	0.0
27	212.0	13.5	-0.5
28	216.0	13.0	-1.0
29	221.0	12.0	-2.0
30	230.0	11.5	-2.5
31	236.0	11.0	-3.0
32	242.0	12.0	-2.0
33	251.0	12.5	-1.5
34	253.0	13.0	-1.0
35	257.0	13.5	-0.5
36	260.0	14.0	0.0
37	264.0	14.5	0.5
38	268.0	15.0	1.0
39	272.0	15.0	1.0
40	278.0	14.5	0.5
41	293.0	14.5	0.5
42	318.0	14.0	0.0
43	330.0	14.0	0.0

RIVER VIEW 11/9/84

ELMCLEN (down)



oo

DRAWDOWN DATA

NAME OF SECTION RIVER VIEW

oo

DATE OF OBSERVATION 11/9/84

VESSEL NAME FRANQUELIN

DIRECTION UPBOUND

VESSEL LENGTH in feet = 349

VESSEL BEAM in feet = 43.5

VESSEL DRAFT in feet = 13

VESSEL SPEED in feet/sec. = 12.9

BOW ON TIME in sec = 86

STERN ON TIME in sec = 113

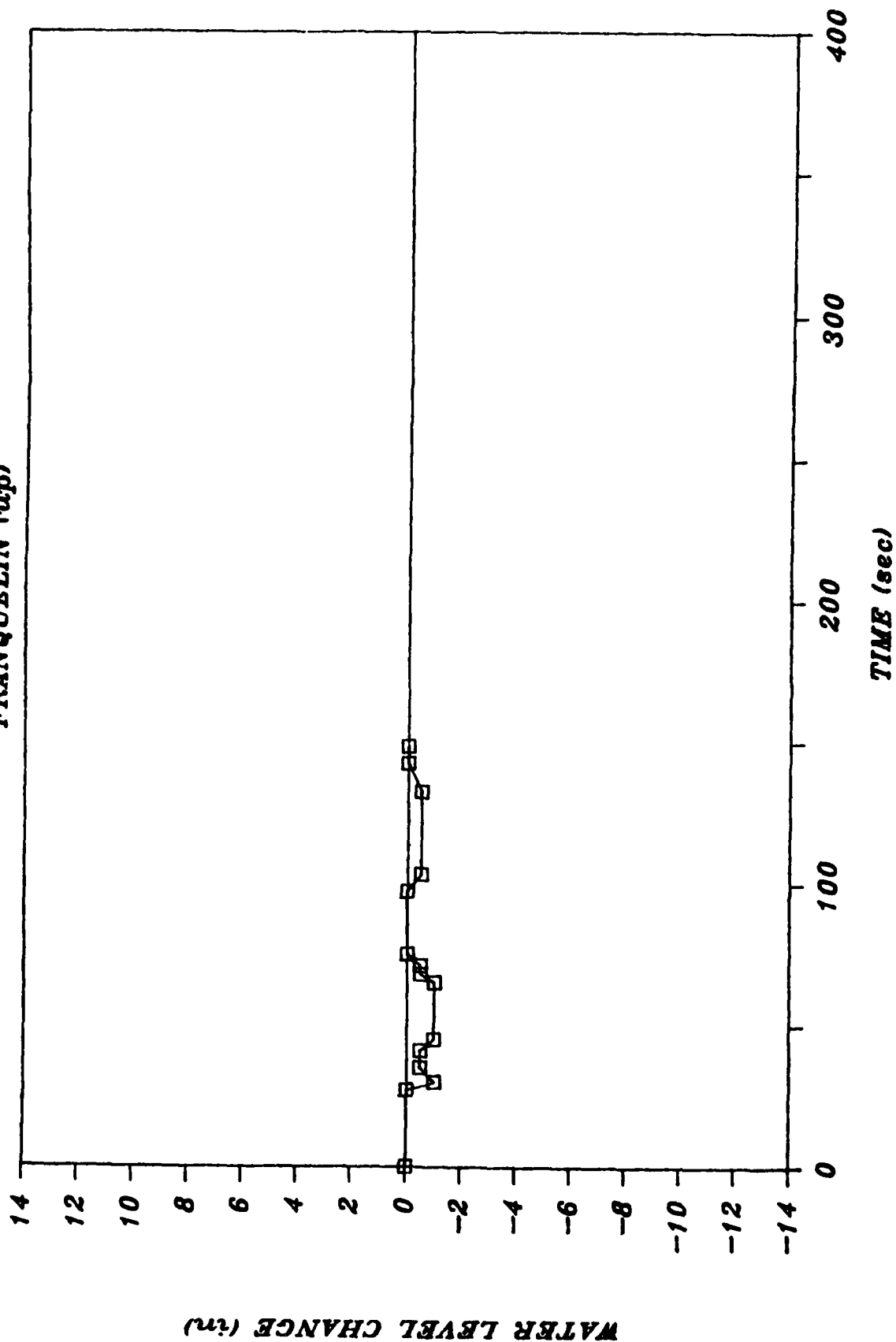
DISTANCE TO STAFF GAUGE from green side in feet = 42

BACKGROUND READING in inches = 23

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	23.0	0.0
2	27.0	23.0	0.0
3	30.0	22.0	-1.0
4	35.0	22.5	-0.5
5	41.0	22.5	-0.5
6	45.0	22.0	-1.0
7	65.0	22.0	-1.0
8	68.0	22.5	-0.5
9	71.0	22.5	-0.5
10	75.0	23.0	0.0
11	97.0	23.0	0.0
12	103.0	22.5	-0.5
13	108.0	22.5	-0.5
14	132.0	22.5	-0.5
15	142.0	23.0	0.0
16	148.0	23.0	0.0

RIVER VIEW 11/9/84

FRANQUELIN (wp)



DRAWDOWN DATA

NAME OF SECTION	RIVER VIEW
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

BACKGROUND READING in inches = 16

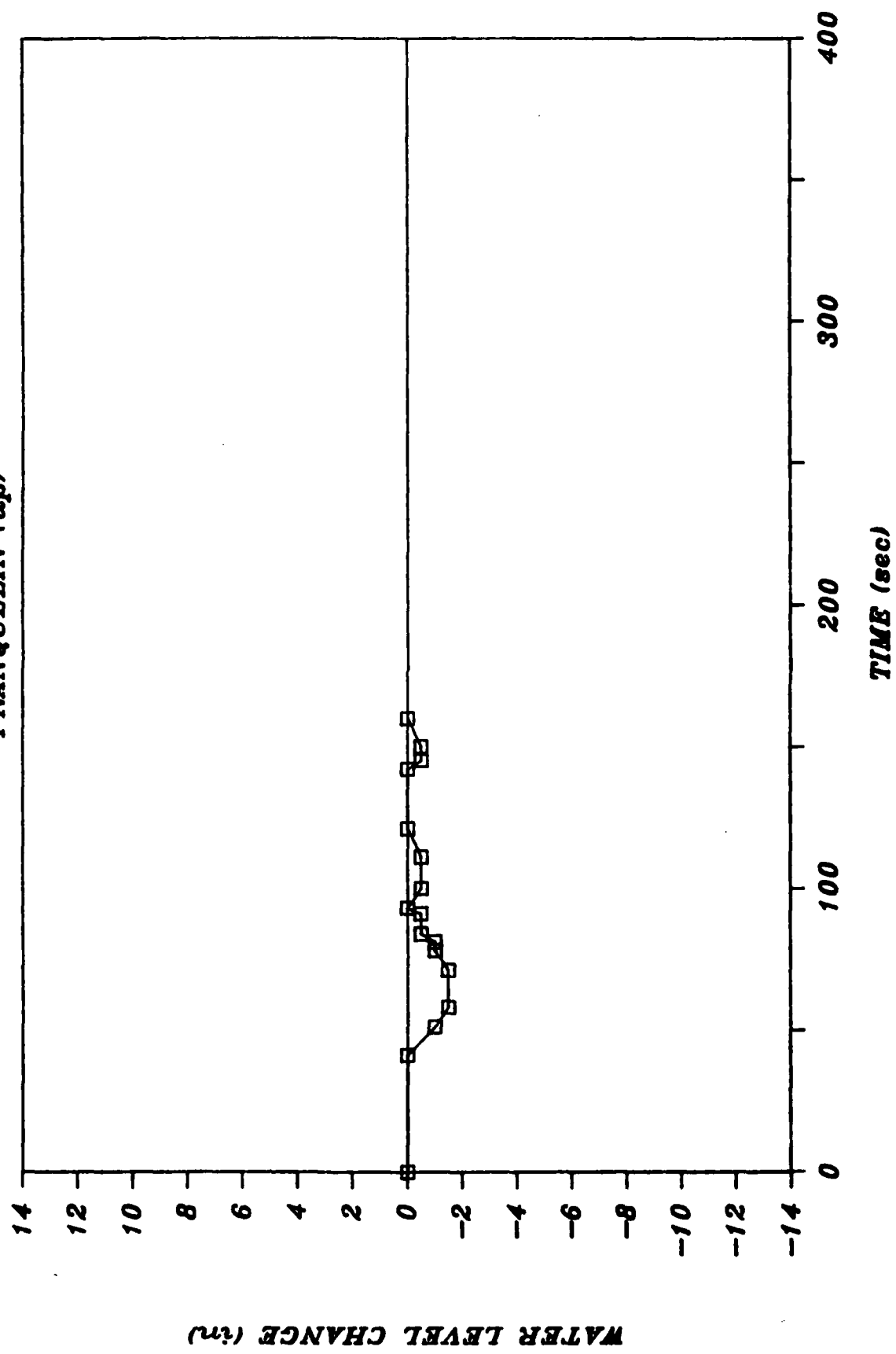
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	16.0	0.0
2	14.0	16.0	0.0
3	33.0	16.0	0.0
4	41.0	16.0	0.0
5	62.0	16.0	0.0
6	64.0	16.0	0.0
7	77.0	16.0	0.0
8	83.0	16.0	0.0
9	91.0	16.0	0.0
10	97.0	16.0	0.0
11	104.0	16.0	0.0
12	106.0	13.5	-0.5
13	111.0	13.0	-1.0
14	116.0	13.5	-0.5
15	118.0	13.0	-1.0
16	138.0	13.0	-1.0
17	144.0	13.5	-0.5
18	149.0	16.0	0.0
19	164.0	16.5	0.5
20	189.0	16.5	0.5

DRAWDOWN DATA (continued)

NAME OF SECTION RIVER VIEW

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	191.0	16.0	0.0
22	211.0	16.0	0.0

RIVER VIEW 11/9/84
FRANQUELIN (wp)



DRAWDOWN DATA

NAME OF SECTION RIVER VIEW

DATE OF OBSERVATION 11/9/84

VESSEL NAME FRANQUELIN

DIRECTION UPBOUND

VESSEL LENGTH in feet = 349

VESSEL BEAM in feet = 43.5

VESSEL DRAFT in feet = 13

VESSEL SPEED in feet/sec. = 12.9

BOW ON TIME in sec = 86

STERN ON TIME in sec = 113

DISTANCE TO STAFF GAUGE from green side in feet = 1800

BACKGROUND READING in inches = 14

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	14.0	0.0
2	11.0	14.0	0.0
3	19.0	14.0	0.0
4	31.0	14.0	0.0
5	41.0	14.0	0.0
6	51.0	13.0	-1.0
7	58.0	12.5	-1.5
8	62.0	12.5	-1.5
9	71.0	12.5	-1.5
10	78.0	13.0	-1.0
11	81.0	13.0	-1.0
12	84.0	13.5	-0.5
13	91.0	13.5	-0.5
14	93.0	14.0	0.0
15	100.0	13.5	-0.5
16	111.0	13.5	-0.5
17	121.0	14.0	0.0
18	131.0	14.0	0.0
19	142.0	14.0	0.0
20	145.0	13.5	-0.5

DRAWDOWN DATA (continued)

NAME OF SECTION RIVER VIEW

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	150.0	13.5	-0.5
22	160.0	14.0	0.0

DRAWDOWN DATA

NAME OF SECTION RIVER VIEW
#####

DATE OF OBSERVATION 11/9/84

VESSEL NAME WILLIAM A. McCONAGLE

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 600

VESSEL BEAM in feet = 60

VESSEL DRAFT in feet = 20

VESSEL SPEED in feet/sec. = 4.8

BOW ON TIME in sec = 80

STERN ON TIME in sec = 204

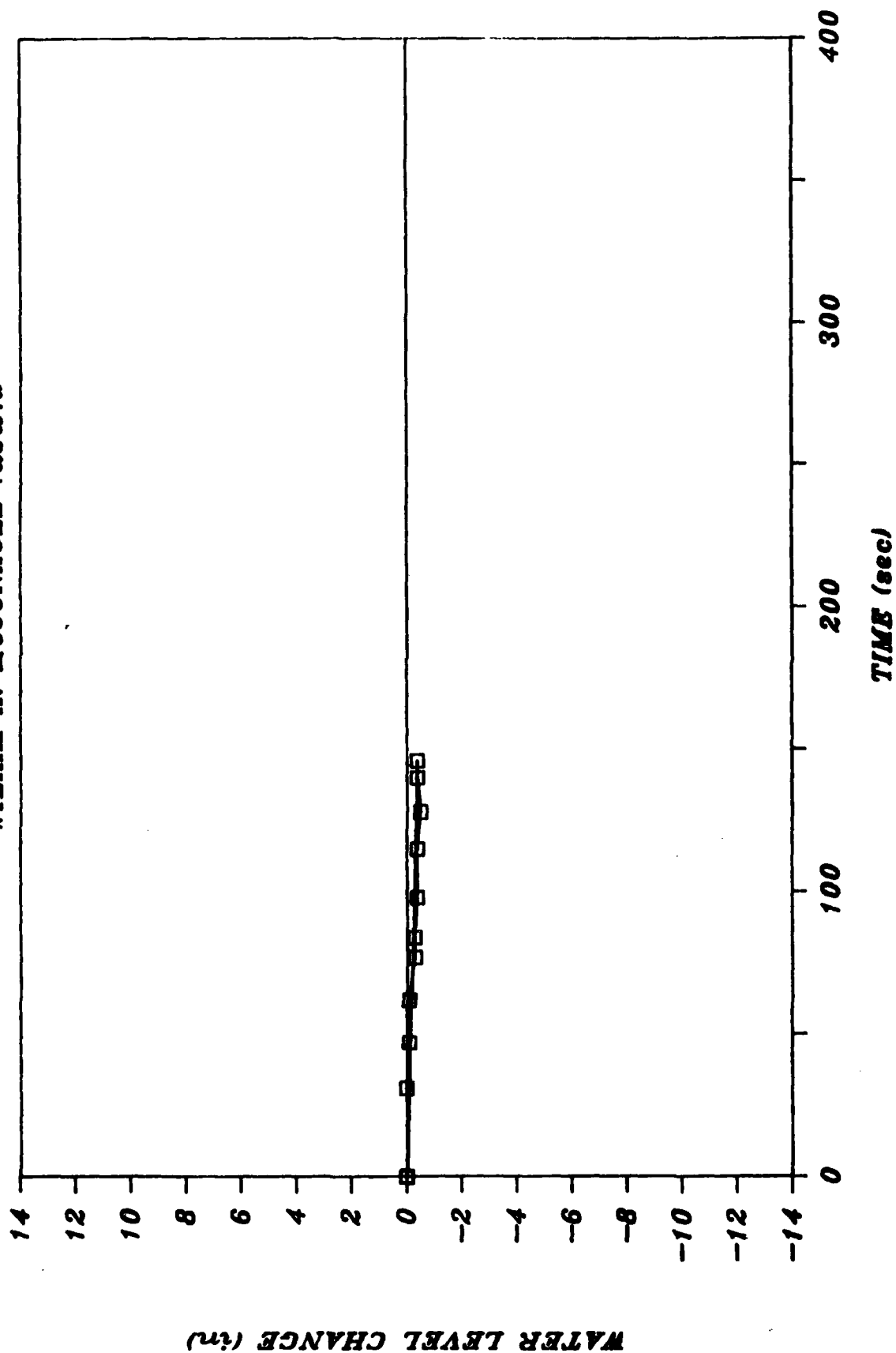
DISTANCE TO STAFF GAUGE from green side in feet = 42

BACKGROUND READING in inches = 20.9

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	20.9	-0.0
2	31.0	20.9	-0.0
3	47.0	20.8	-0.1
4	62.0	20.8	-0.1
5	77.0	20.6	-0.3
6	84.0	20.6	-0.3
7	98.0	20.5	-0.4
8	115.0	20.5	-0.4
9	128.0	20.4	-0.5
10	140.0	20.5	-0.4
11	146.0	20.5	-0.4

RIVER VIEW 11/9/84

WILLIAM A. McCONAGLE (down)



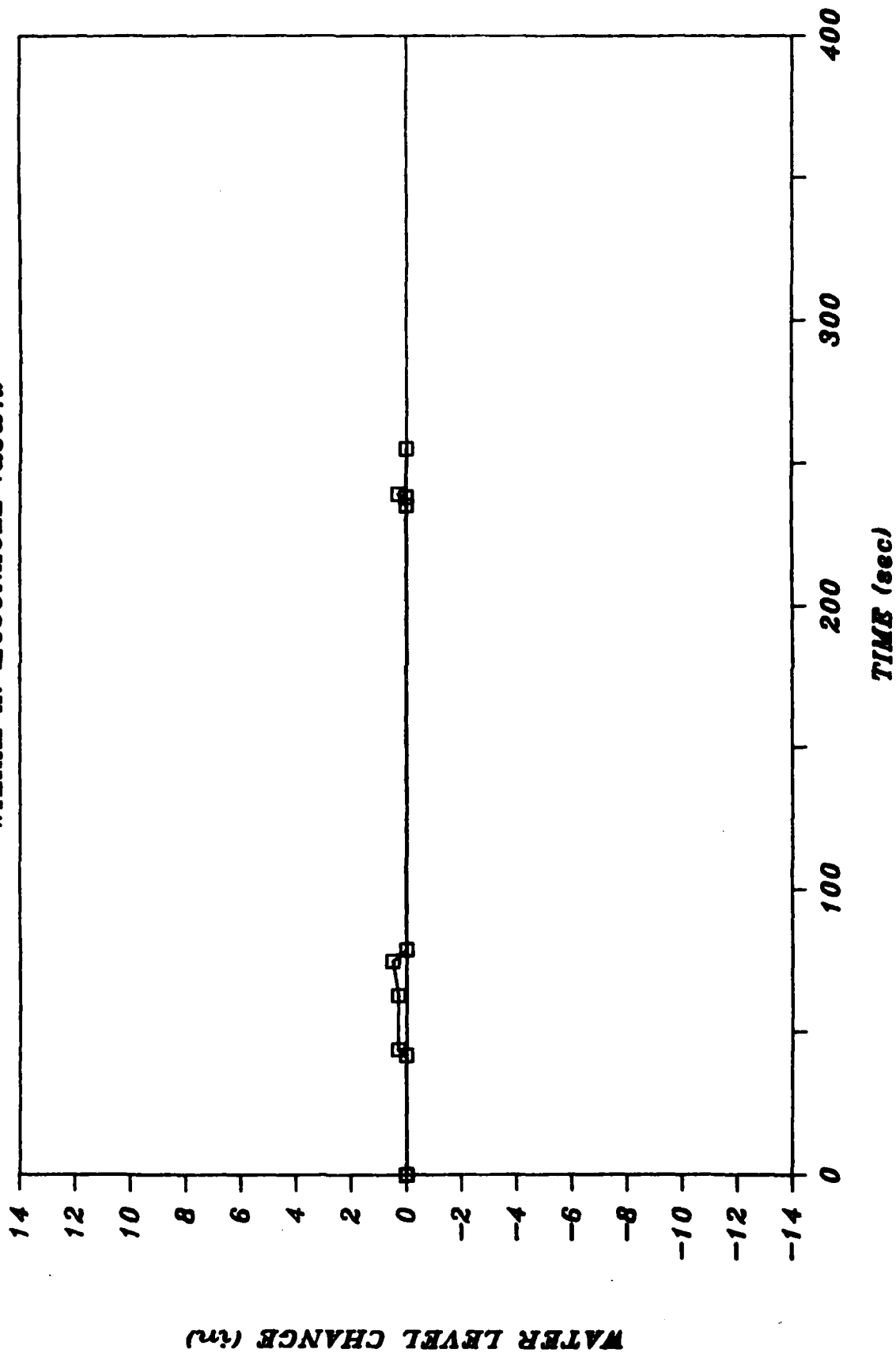
NAME OF SECTION	RIVER VIEW
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

BACKGROUND READING in inches = 14

BA40

RIVER VIEW 11/9/84

WILLIAM A. McCONAGLE (down)



DRAWDOWN DATA

NAME OF SECTION RIVER VIEW

DATE OF OBSERVATION 11/9/84

VESSEL NAME WILLIAM A. McCONAGLE

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 600

VESSEL BEAM in feet = 60

VESSEL DRAFT in feet = 20

VESSEL SPEED in feet/sec. = 4.8

BOW ON TIME in sec = 80

STERN ON TIME in sec = 204

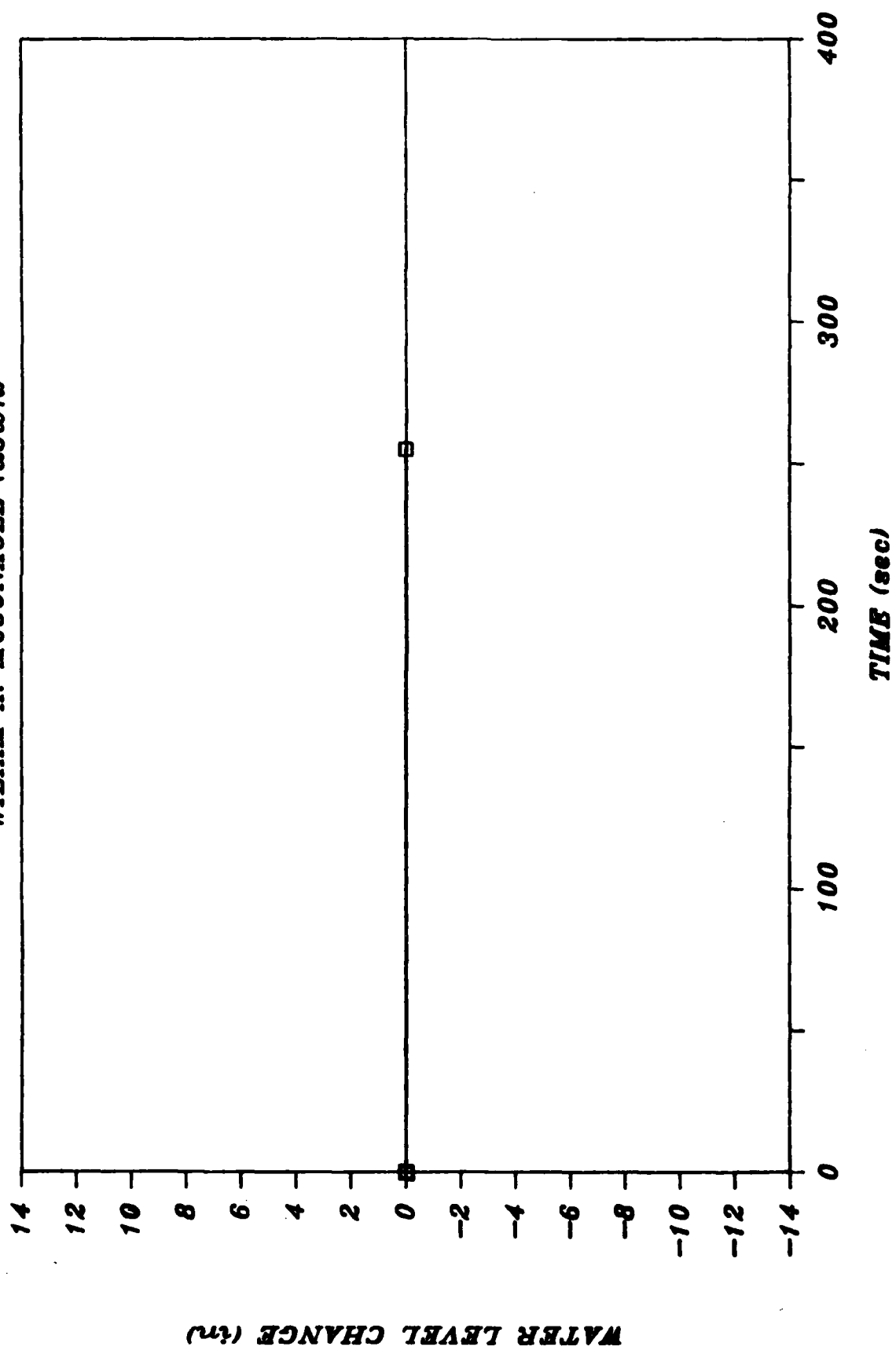
DISTANCE TO STAFF GAUGE from green side in feet = 1800

BACKGROUND READING in inches = 11.75

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	11.8	0.0
2	78.0	11.8	0.0
3	84.0	11.8	0.0
4	195.0	11.8	0.0
5	206.0	11.8	0.0
6	255.0	11.8	0.0

RIVER VIEW 11/9/84

WILLIAM A. McCONAGLE (down)



NAME OF SECTION	RIVER VIEW
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

XX

BACKGROUND READING in inches = 19.5

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	19.5	0.0
2	30.0	19.5	0.0
3	36.0	20.5	1.0
4	39.0	20.5	1.0
5	51.0	20.0	0.5
6	56.0	19.0	-0.5
7	61.0	18.5	-1.0
8	64.0	18.0	-1.5
9	66.0	17.5	-2.0
10	71.0	17.0	-2.5
11	76.0	16.0	-3.5
12	77.0	15.5	-4.0
13	81.0	15.0	-4.5
14	85.0	14.5	-5.0
15	88.0	14.0	-5.5
16	98.0	14.0	-5.5
17	101.0	13.5	-6.0
18	104.0	13.5	-6.0
19	112.0	12.5	-7.0
20	115.0	12.0	-7.5

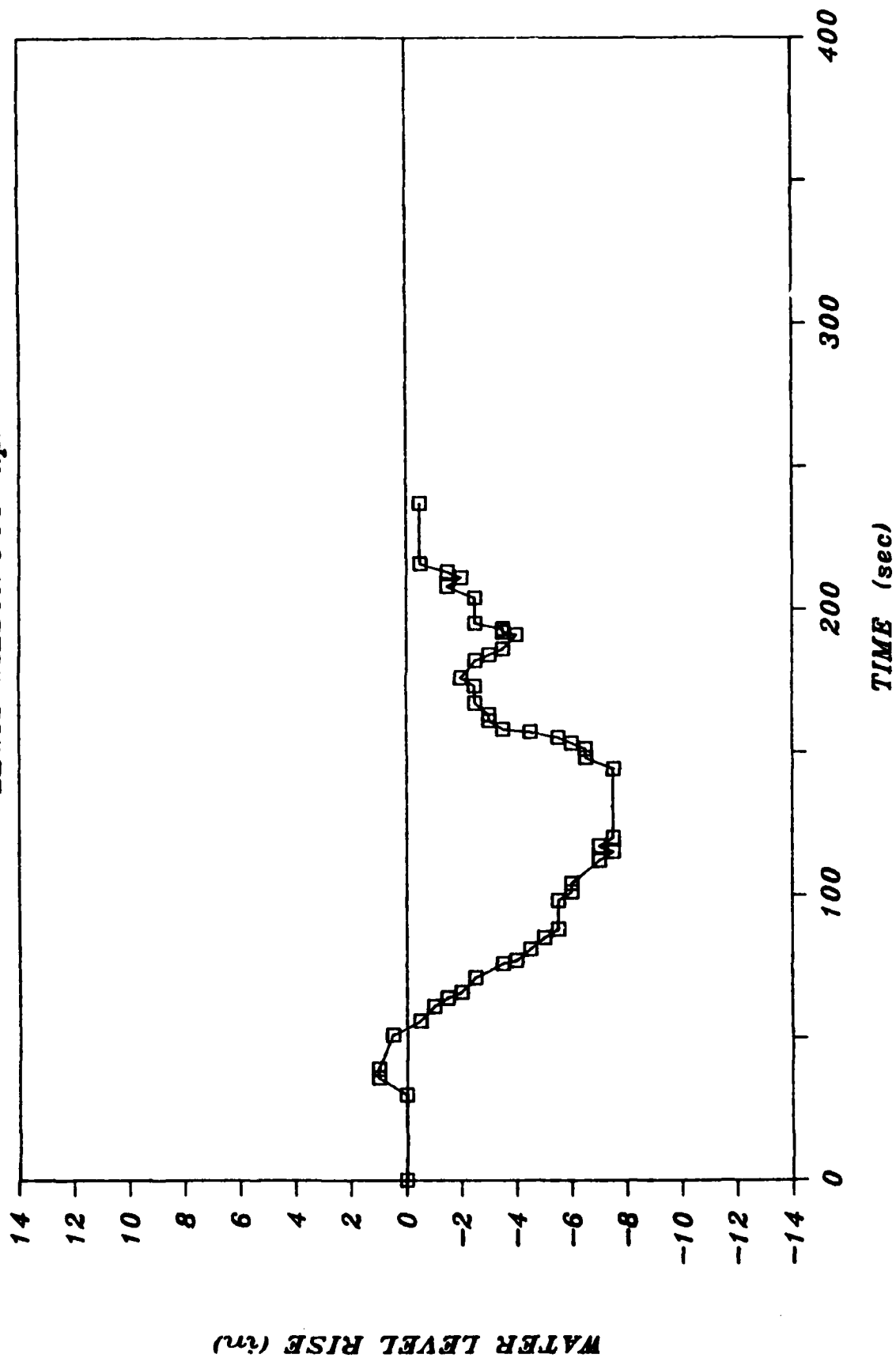
DRAWDOWN DATA (continued)

NAME OF SECTION RIVER VIEW

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	117.0	12.5	-7.0
22	123.0	12.0	-7.5
23	144.0	12.0	-7.5
24	148.0	13.0	-6.5
25	151.0	13.0	-6.5
26	153.0	13.5	-6.0
27	155.0	14.0	-5.5
28	157.0	15.0	-4.5
29	158.0	16.0	-3.5
30	161.0	16.5	-3.0
31	163.0	16.5	-3.0
32	167.0	17.0	-2.5
33	173.0	17.0	-2.5
34	176.0	17.5	-2.0
35	182.0	17.0	-2.5
36	184.0	16.5	-3.0
37	186.0	16.0	-3.5
38	191.0	15.5	-4.0
39	192.0	16.0	-3.5
40	193.0	16.0	-3.5
41	195.0	17.0	-2.5
42	204.0	17.0	-2.5
43	208.0	18.0	-1.5
44	211.0	17.5	-2.0
45	213.0	18.0	-1.5
46	216.0	19.0	-0.5
47	237.0	19.0	-0.5

RIVER VIEW 11/10/84

LEWIS WILSON FOY (wp)



DRAWDOWN DATA

NAME OF SECTION	RIVER VIEW
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

VESSEL NAME TADOUSSAC

VESSEL LENGTH in feet = 730

VESSEL DRAFT in feet = 27

BOW ON TIME in sec = 28

DISTANCE TO STAFF GAUGE from green side in feet = 60

BACKGROUND READING in inches = 21.5

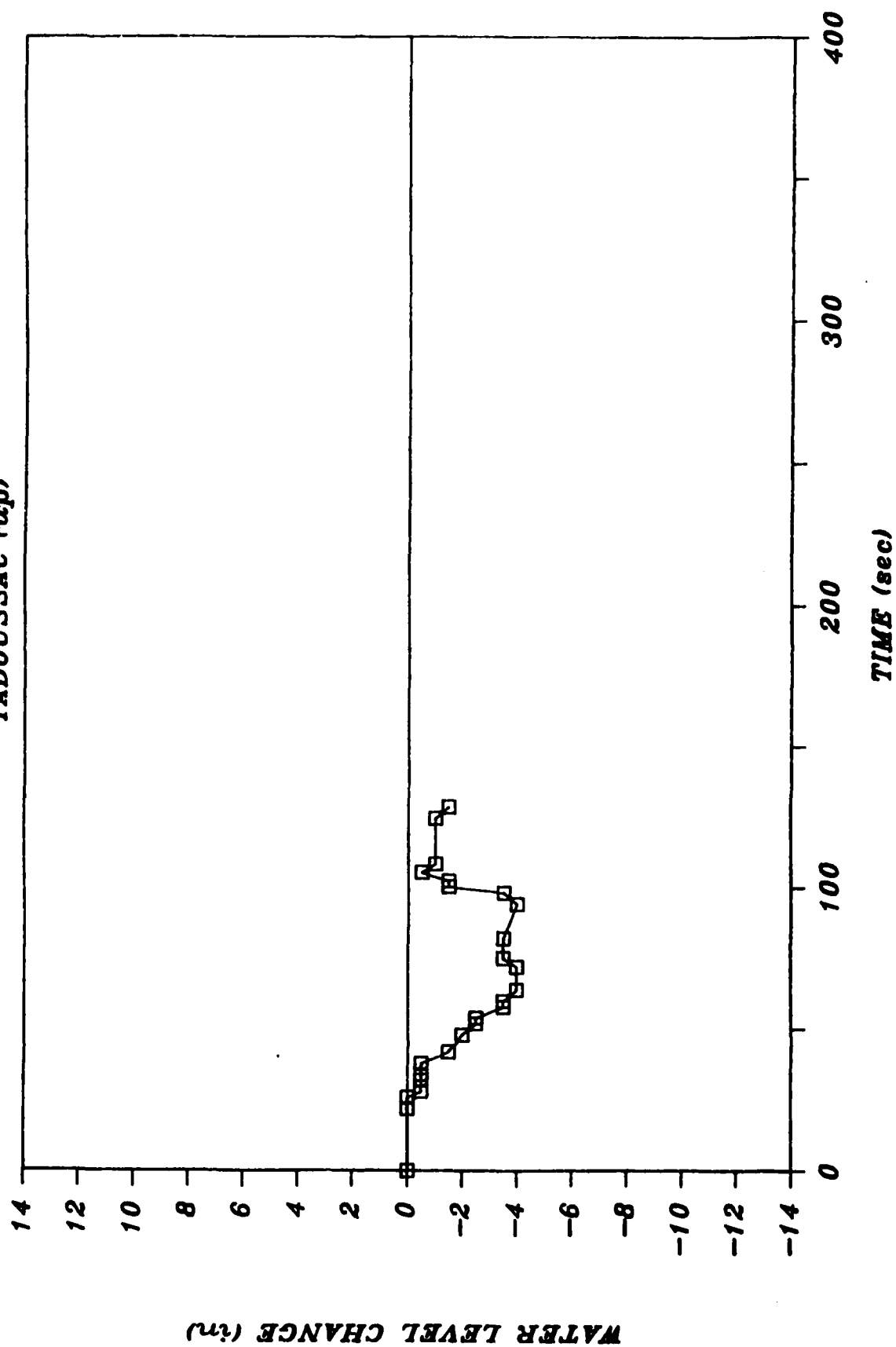
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	21.5	0.0
2	22.0	21.5	0.0
3	26.0	21.5	0.0
4	28.0	21.0	-0.5
5	32.0	21.0	-0.5
6	34.0	21.0	-0.5
7	38.0	21.0	-0.5
8	42.0	20.0	-1.5
9	48.0	19.5	-2.0
10	52.0	19.0	-2.5
11	54.0	19.0	-2.5
12	58.0	18.0	-3.5
13	60.0	18.0	-3.5
14	64.0	17.5	-4.0
15	68.0	17.5	-4.0
16	70.0	17.5	-4.0
17	72.0	17.5	-4.0
18	75.0	18.0	-3.5
19	78.0	18.0	-3.5
20	80.0	18.0	-3.5

DRAWDOWN DATA (continued)

NAME OF SECTION RIVER VIEW

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	82.0	18.0	-3.5
22	94.0	17.5	-4.0
23	98.0	18.0	-3.5
24	100.0	20.0	-1.5
25	102.0	20.0	-1.5
26	105.0	21.0	-0.5
27	108.0	20.5	-1.0
28	112.0	20.5	-1.0
29	120.0	20.5	-1.0
30	122.0	20.5	-1.0
31	124.0	20.5	-1.0
32	128.0	20.0	-1.5

RIVER VIEW 11/10/84
TADOUSSAC (wp)



 DRAWDOWN DATA

NAME OF SECTION RIVER VIEW
 #####

DATE OF OBSERVATION 11/11/84

VESSEL NAME BELLE RIVER

DIRECTION UPBOUND

VESSEL LENGTH in feet = 1000

VESSEL BEAM in feet = 105

VESSEL DRAFT in feet = 21

VESSEL SPEED in feet/sec. = 10.6

BOW ON TIME in sec = 49

STERN ON TIME in sec = 143

DISTANCE TO STAFF GAUGE from green side in feet = 60

BACKGROUND READING in inches = 17

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	17.0	0.0
2	8.0	17.0	0.0
3	16.0	17.0	0.0
4	26.0	17.0	0.0
5	29.0	17.0	0.0
6	33.0	17.0	0.0
7	51.0	17.0	0.0
8	55.0	16.0	-1.0
9	61.0	15.0	-2.0
10	63.0	16.0	-1.0
11	68.0	15.5	-1.5
12	70.0	15.0	-2.0
13	73.0	14.5	-2.5
14	74.0	14.0	-3.0
15	77.0	14.0	-3.0
16	79.0	13.5	-3.5
17	81.0	13.0	-4.0
18	86.0	13.0	-4.0
19	90.0	12.5	-4.5
20	93.0	12.5	-4.5

DRAWDOWN DATA (continued)

NAME OF SECTION	RIVER VIEW
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

21	96.0	12.0	-5.0
22	98.0	12.0	-5.0
23	102.0	11.5	-5.5
24	105.0	11.5	-5.5
25	108.0	11.0	-6.0
26	110.0	11.0	-6.0
27	113.0	11.5	-5.5
28	130.0	10.0	-7.0
29	133.0	10.0	-7.0
30	140.0	9.5	-7.5
31	149.0	10.0	-7.0
32	151.0	10.0	-7.0
33	155.0	11.0	-6.0
34	158.0	12.0	-5.0
35	161.0	12.5	-4.5
36	164.0	13.0	-4.0
37	168.0	13.5	-3.5
38	170.0	14.0	-3.0
39	172.0	15.5	-1.5
40	174.0	15.5	-1.5
41	177.0	16.0	-1.0
42	182.0	15.5	-1.5
43	185.0	15.0	-2.0
44	189.0	14.5	-2.5
45	192.0	14.5	-2.5
46	200.0	14.5	-2.5
47	202.0	15.0	-2.0
48	208.0	15.5	-1.5
49	212.0	15.5	-1.5
50	219.0	16.0	-1.0
51	223.0	16.0	-1.0
52	230.0	16.0	-1.0
53	236.0	16.0	-1.0
54	243.0	15.5	-1.5
55	248.0	15.5	-1.5
56	253.0	15.5	-1.5
57	258.0	15.0	-2.0
58	262.0	15.5	-1.5
59	264.0	16.0	-1.0
60	268.0	16.0	-1.0
61	270.0	16.0	-1.0
62	274.0	16.5	-0.5
63	281.0	16.5	-0.5
64	288.0	16.0	-1.0

#####

DRAWDOWN DATA (continued)

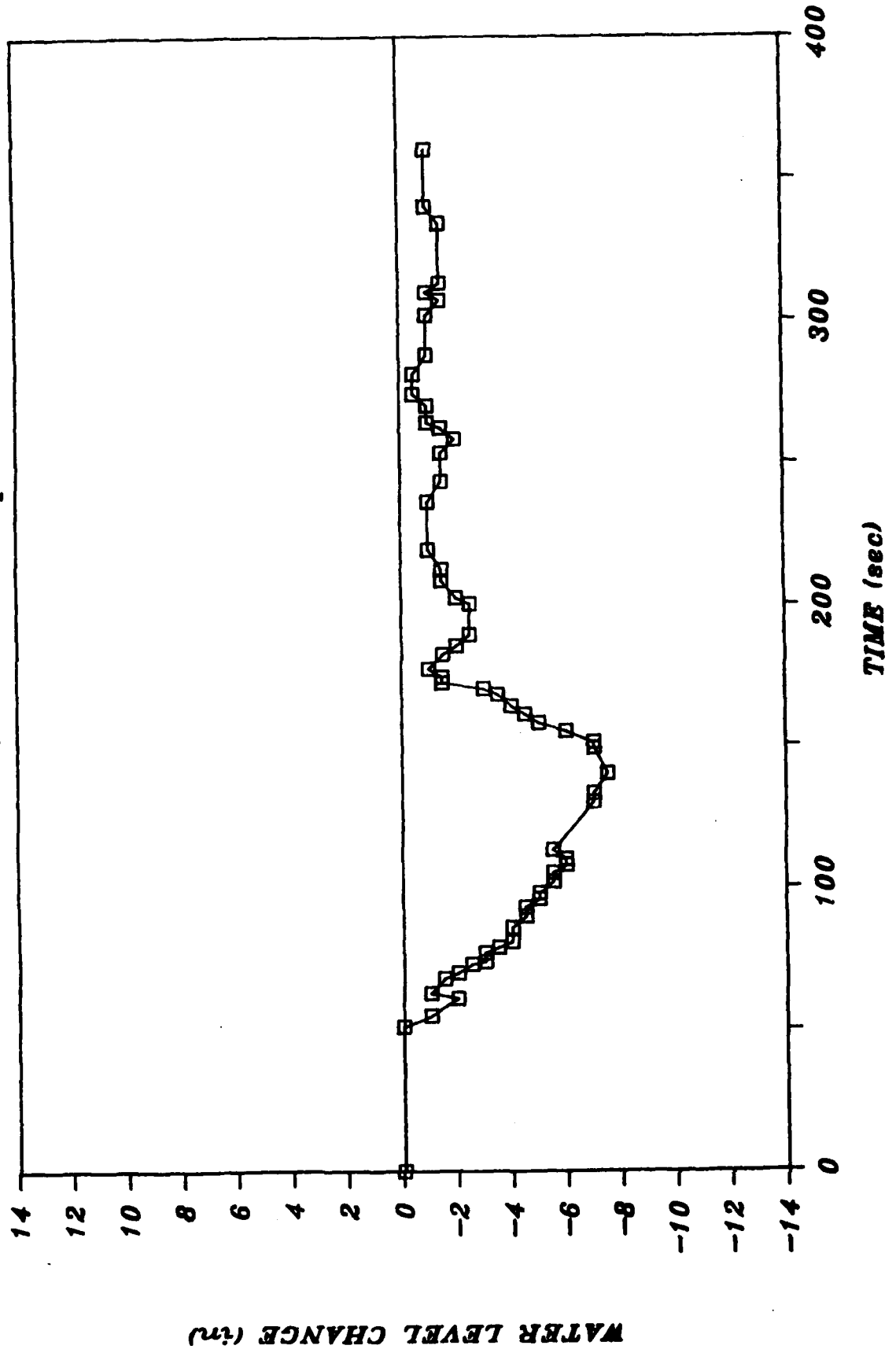
NAME OF SECTION RIVER VIEW

#####

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
65	292.0	16.0	-1.0
66	297.0	16.0	-1.0
67	302.0	16.0	-1.0
68	308.0	15.5	-1.5
69	310.0	16.0	-1.0
70	313.0	15.5	-1.5
71	318.0	15.5	-1.5
72	334.0	15.5	-1.5
73	340.0	16.0	-1.0
74	350.0	16.0	-1.0
75	360.0	16.0	-1.0

RIVER VIEW 11/11/84

BELLE RIVER (up)



 DRAWDOWN DATA

NAME OF SECTION RIVER VIEW
 #####

DATE OF OBSERVATION 6/2/85

VESSEL NAME TADOUSSAC

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 28

VESSEL SPEED in feet/sec. = 12.8

BOW ON TIME in sec = 68

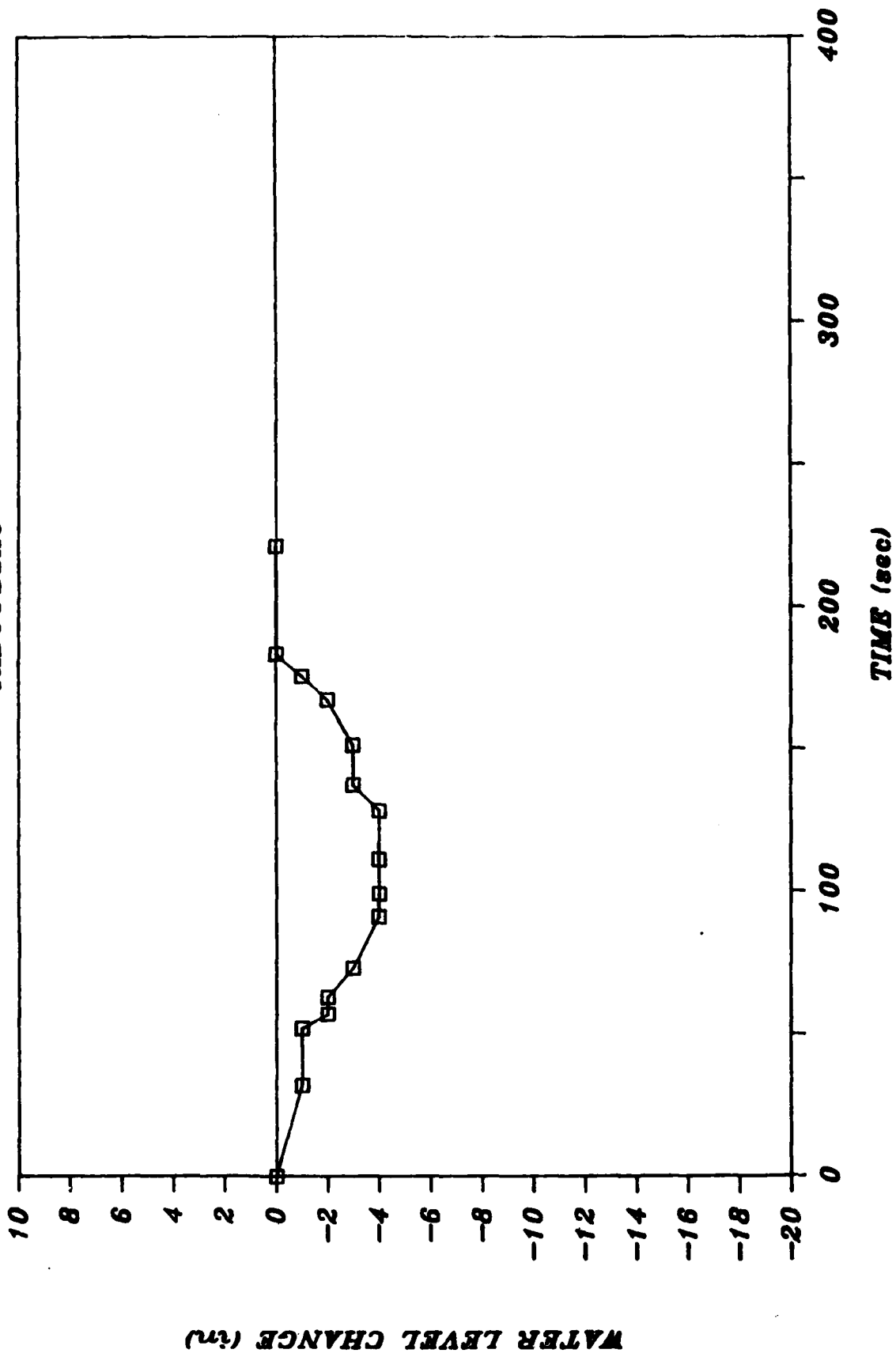
STERN ON TIME in sec = 125

DISTANCE TO STAFF GAUGE from green side in feet = 40

BACKGROUND READING in inches = 29

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	29.0	0.0
2	32.0	28.0	-1.0
3	52.0	28.0	-1.0
4	57.0	27.0	-2.0
5	63.0	27.0	-2.0
6	73.0	26.0	-3.0
7	91.0	25.0	-4.0
8	99.0	25.0	-4.0
9	111.0	25.0	-4.0
10	128.0	25.0	-4.0
11	137.0	26.0	-3.0
12	151.0	26.0	-3.0
13	167.0	27.0	-2.0
14	175.0	28.0	-1.0
15	183.0	29.0	0.0
16	221.0	29.0	0.0

RIVER VIEW (green)
TADOUSSAC



NAME OF SECTION RIVER VIEW

DATE OF OBSERVATION 6/2/85

VESSEL NAME **CHARLES E. WILSON**

DIRECTION	UPBOUND
-----------	---------

VESSEL LENGTH in feet = 680

VESSEL BEAM in foot = 78

VESSEL DRAFT in feet = 18

VESSEL SPEED in feet/sec. = 9.58

BOW ON TIME in sec = 117

STERN ON TIME in sec = 188

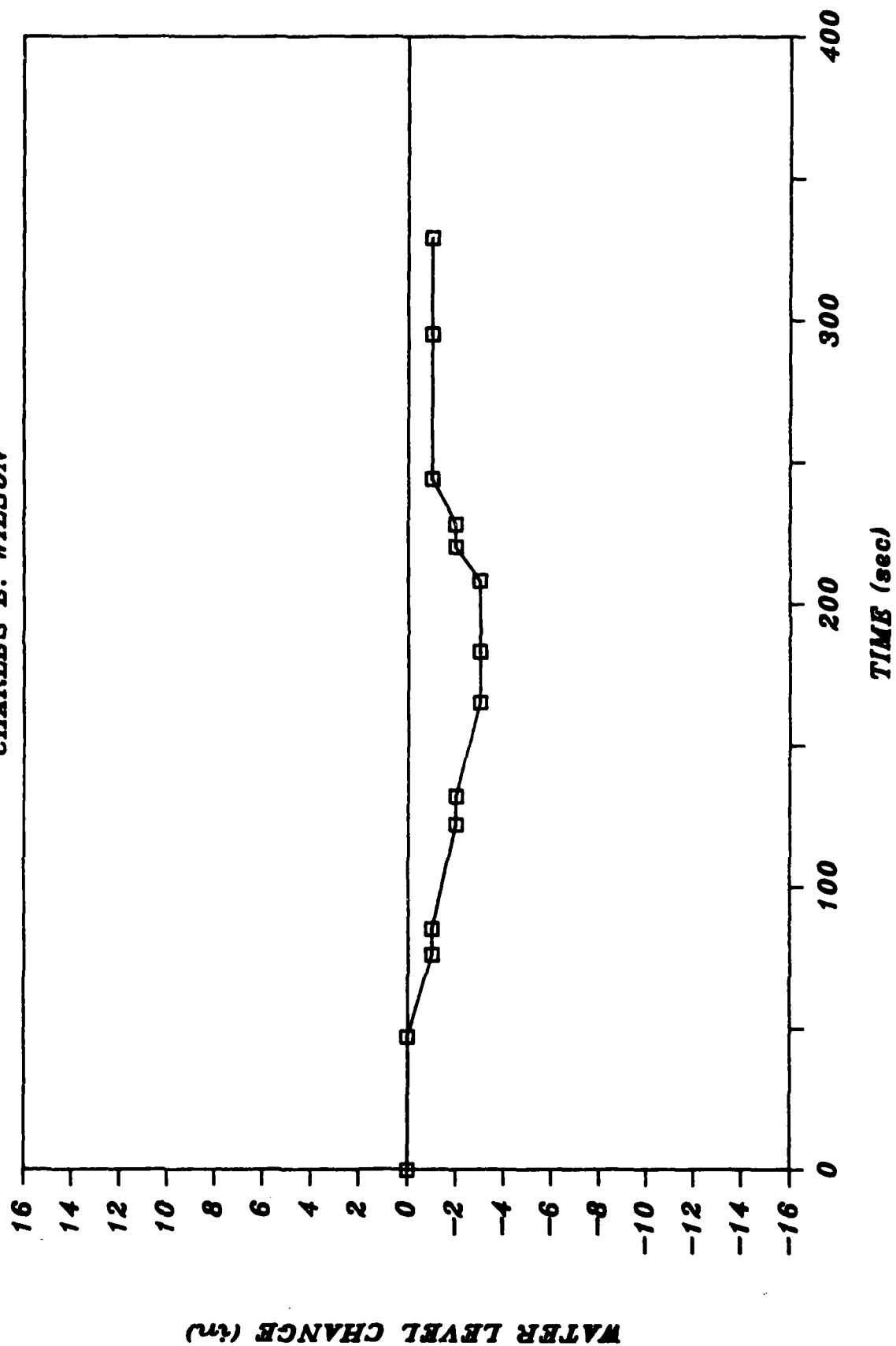
DISTANCE TO STAFF GAUGE from green side in feet = 40

BACKGROUND READING in inches = 28

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	28.0	0.0
2	47.0	28.0	0.0
3	76.0	27.0	-1.0
4	85.0	27.0	-1.0
5	122.0	26.0	-2.0
6	132.0	26.0	-2.0
7	165.0	25.0	-3.0
8	183.0	25.0	-3.0
9	208.0	25.0	-3.0
10	220.0	26.0	-2.0
11	228.0	26.0	-2.0
12	244.0	27.0	-1.0
13	295.0	26.0	-2.0
14	329.0	27.0	-1.0

RIVER VIEW (green)

CHARLES E. WILSON



DRAWDOWN DATA

NAME OF SECTION RIVER VIEW

DATE OF OBSERVATION 6/2/85

VESSEL NAME CHARLES E. WILSON

DIRECTION UPBOUND

VESSEL LENGTH in feet = 680

VESSEL BEAM in feet = 78

VESSEL DRAFT in feet = 18

VESSEL SPEED in feet/sec. = 9.58

BOW ON TIME in sec = 117

STERN ON TIME in sec = 188

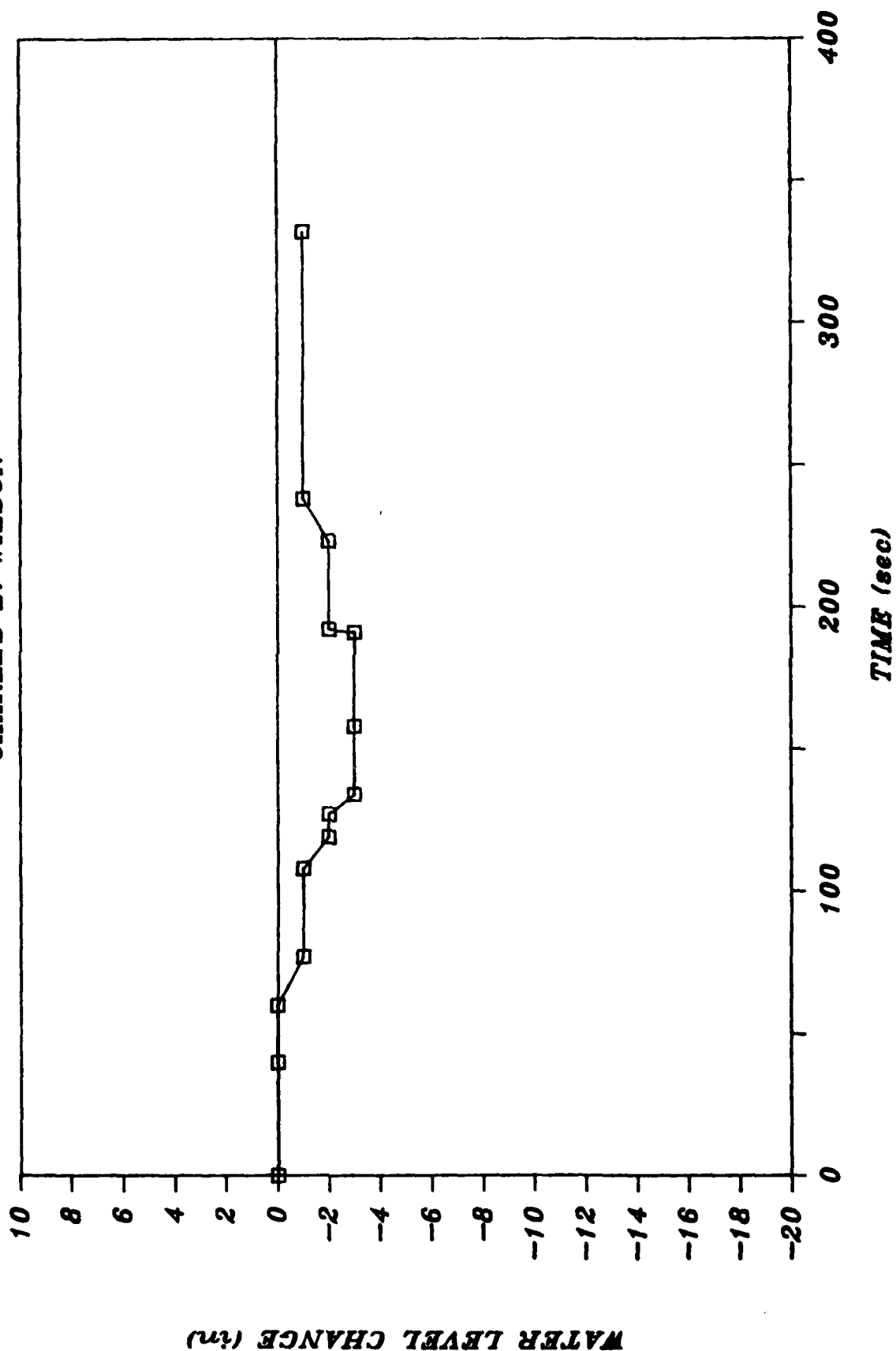
DISTANCE TO STAFF GAUGE from green side in feet = 1755

BACKGROUND READING in inches = 25

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	25.0	0.0
2	40.0	25.0	0.0
3	60.0	25.0	0.0
4	77.0	24.0	-1.0
5	108.0	24.0	-1.0
6	119.0	23.0	-2.0
7	127.0	23.0	-2.0
8	134.0	22.0	-3.0
9	158.0	22.0	-3.0
10	191.0	22.0	-3.0
11	192.0	23.0	-2.0
12	223.0	23.0	-2.0
13	238.0	24.0	-1.0
14	332.0	24.0	-1.0

RIVER VIEW (red)

CHARLES E. WILSON



DRAWDOWN DATA

NAME OF SECTION	RIVER VIEW
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

DATE OF OBSERVATION 6/2/85

VESSEL NAME **AMERICAN MARINER**

DIRECTION	DOWNBOUND
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

VESSEL LENGTH in feet = 728

VESSEL BEAM in feet = 78

VESSEL DRAFT in feet = 27

VESSEL SPEED in feet/sec. = 8.0

BOW ON TIME in sec = 119

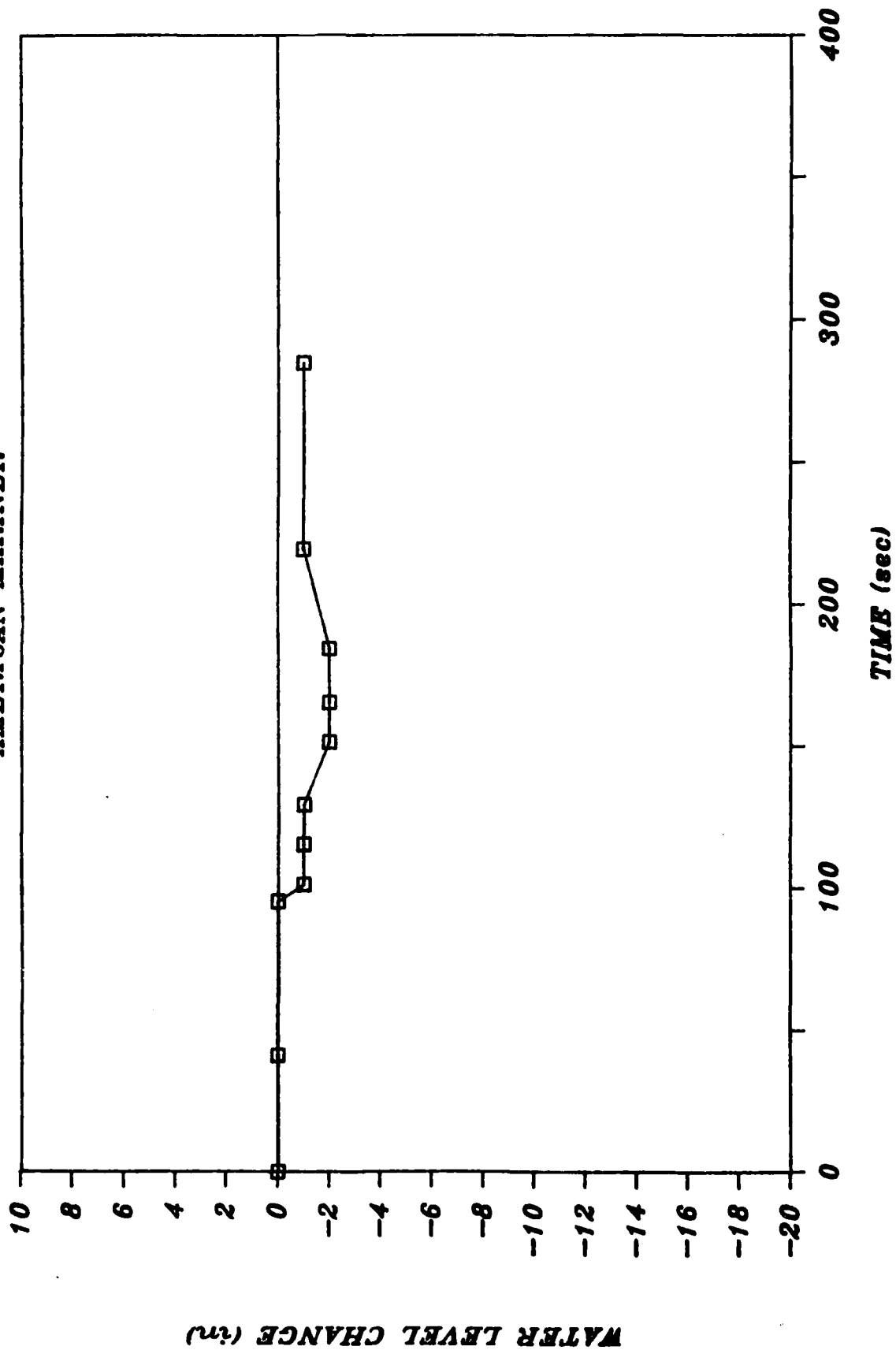
STERN ON TIME in sec = 210

DISTANCE TO STAFF GAUGE from green side in feet = 40

BACKGROUND READING in inches = 28

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	28.0	0.0
2	41.0	28.0	0.0
3	95.0	28.0	0.0
4	101.0	27.0	-1.0
5	115.0	27.0	-1.0
6	129.0	27.0	-1.0
7	151.0	26.0	-2.0
8	165.0	26.0	-2.0
9	184.0	26.0	-2.0
10	219.0	27.0	-1.0
11	285.0	27.0	-1.0

RIVER VIEW (green)
AMERICAN MARINER



DRAWDOWN DATA

NAME OF SECTION RIVER VIEW

DATE OF OBSERVATION 6/2/85

VESSEL NAME AMERICAN MARINER

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 728

VESSEL BEAM in feet = 78

VESSEL DRAFT in feet = 27

VESSEL SPEED in feet/sec. = 8.0

BOW ON TIME in sec = 119

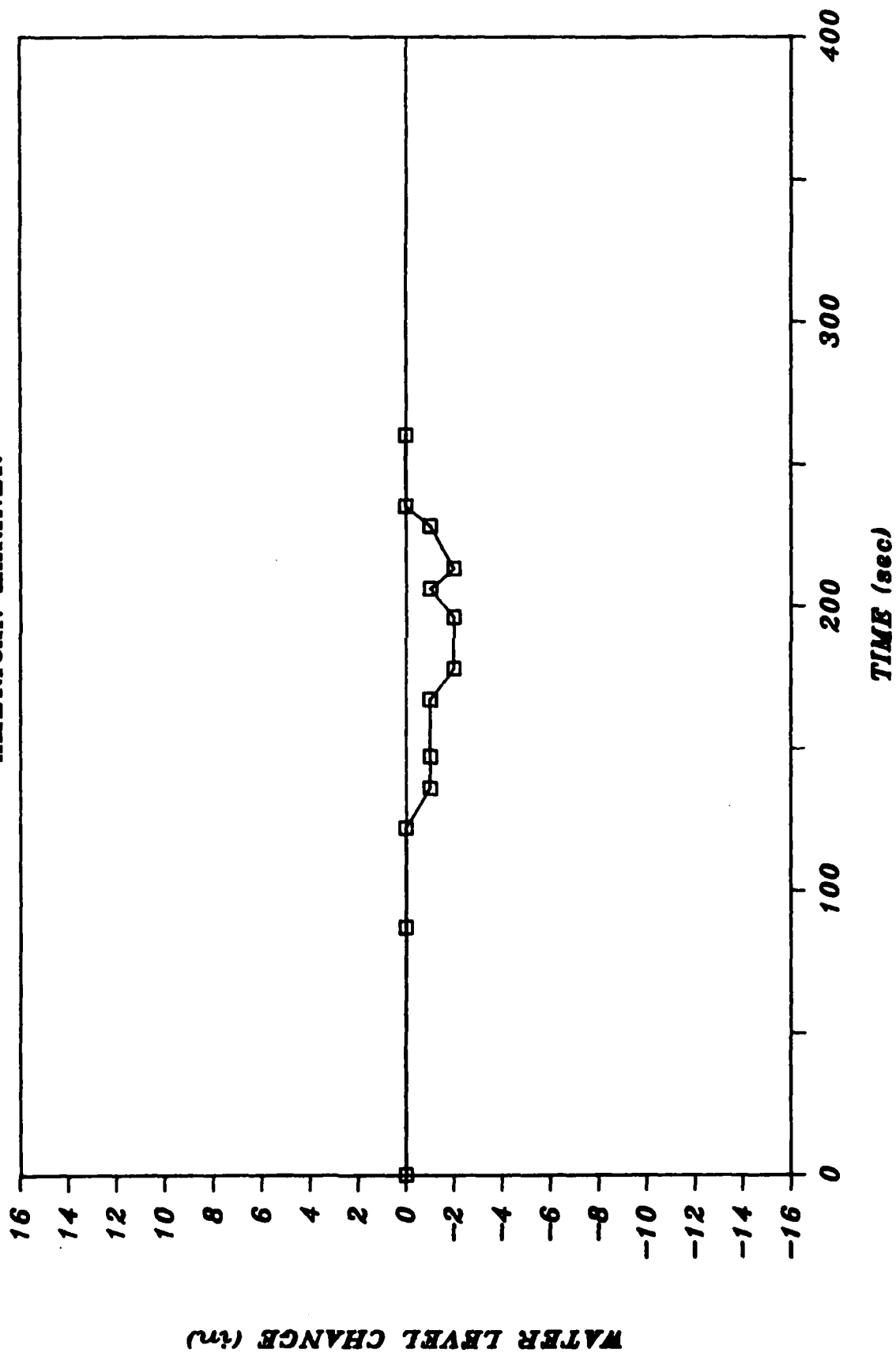
STERN ON TIME in sec = 210

DISTANCE TO STAFF GAUGE from green side in feet = 1755

BACKGROUND READING in inches = 19

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	19.0	0.0
2	87.0	19.0	0.0
3	122.0	19.0	0.0
4	136.0	18.0	-1.0
5	147.0	18.0	-1.0
6	167.0	18.0	-1.0
7	178.0	17.0	-2.0
8	196.0	17.0	-2.0
9	206.0	18.0	-1.0
10	213.0	17.0	-2.0
11	228.0	18.0	-1.0
12	235.0	19.0	0.0

RIVER VIEW (red)
AMERICAN MARINER



oo

DRAWDOWN DATA

NAME OF SECTION RIVER VIEW

oo

DATE OF OBSERVATION 6/5/85

VESSEL NAME J.N. McWATTERS

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 723

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 27

VESSEL SPEED in feet/sec. = 12.05

BOW ON TIME in sec = 118

STERN ON TIME in sec = 178

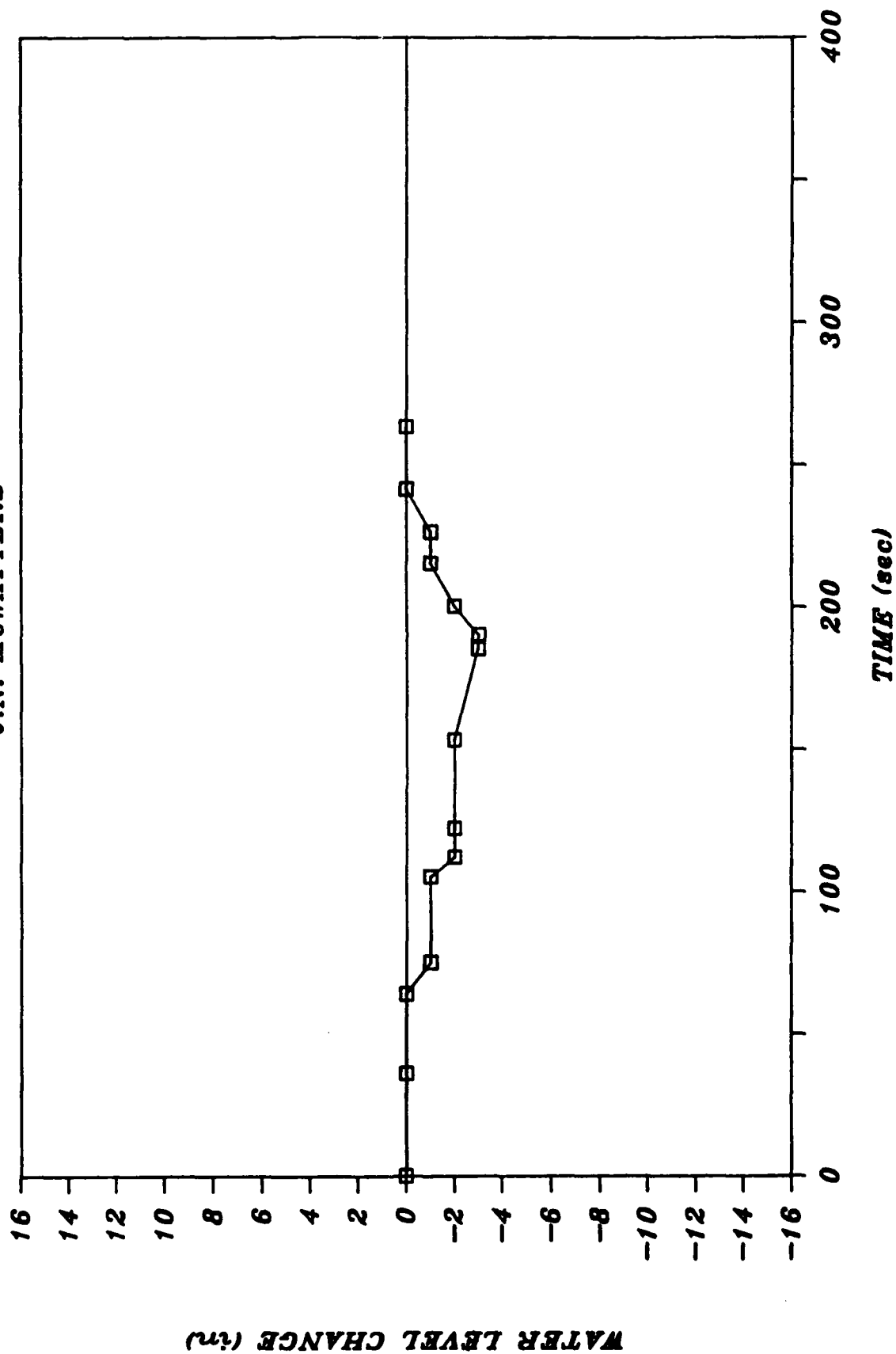
DISTANCE TO STAFF GAUGE from green side in feet = 40

BACKGROUND READING in inches = 26

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	26.0	0.0
2	36.0	26.0	0.0
3	75.0	25.0	-1.0
4	105.0	25.0	-1.0
5	112.0	24.0	-2.0
6	122.0	24.0	-2.0
7	153.0	24.0	-2.0
8	185.0	23.0	-3.0
9	190.0	23.0	-3.0
10	200.0	24.0	-2.0
11	215.0	25.0	-1.0
12	226.0	25.0	-1.0
13	241.0	26.0	0.0
14	263.0	26.0	0.0

RIVER VIEW (green)

J.N. McWATERS



NAME OF SECTION	RIVER VIEW
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

BACKGROUND READING in inches = 22

BA66

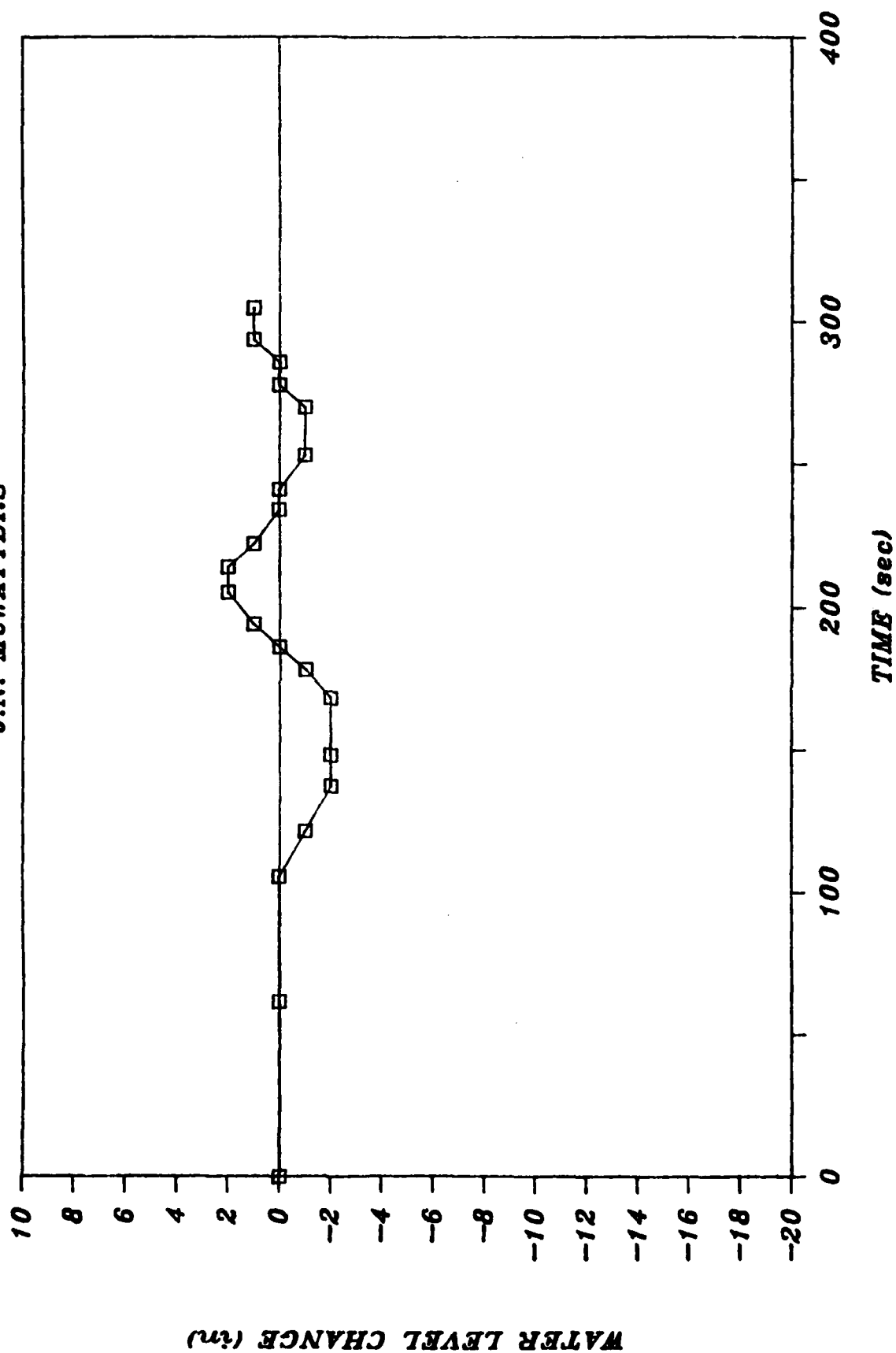
DRAWDOWN DATA (continued)

NAME OF SECTION RIVER VIEW

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	305.0	23.0	1.0

RIVER VIEW (red)

J.N. McWATERS

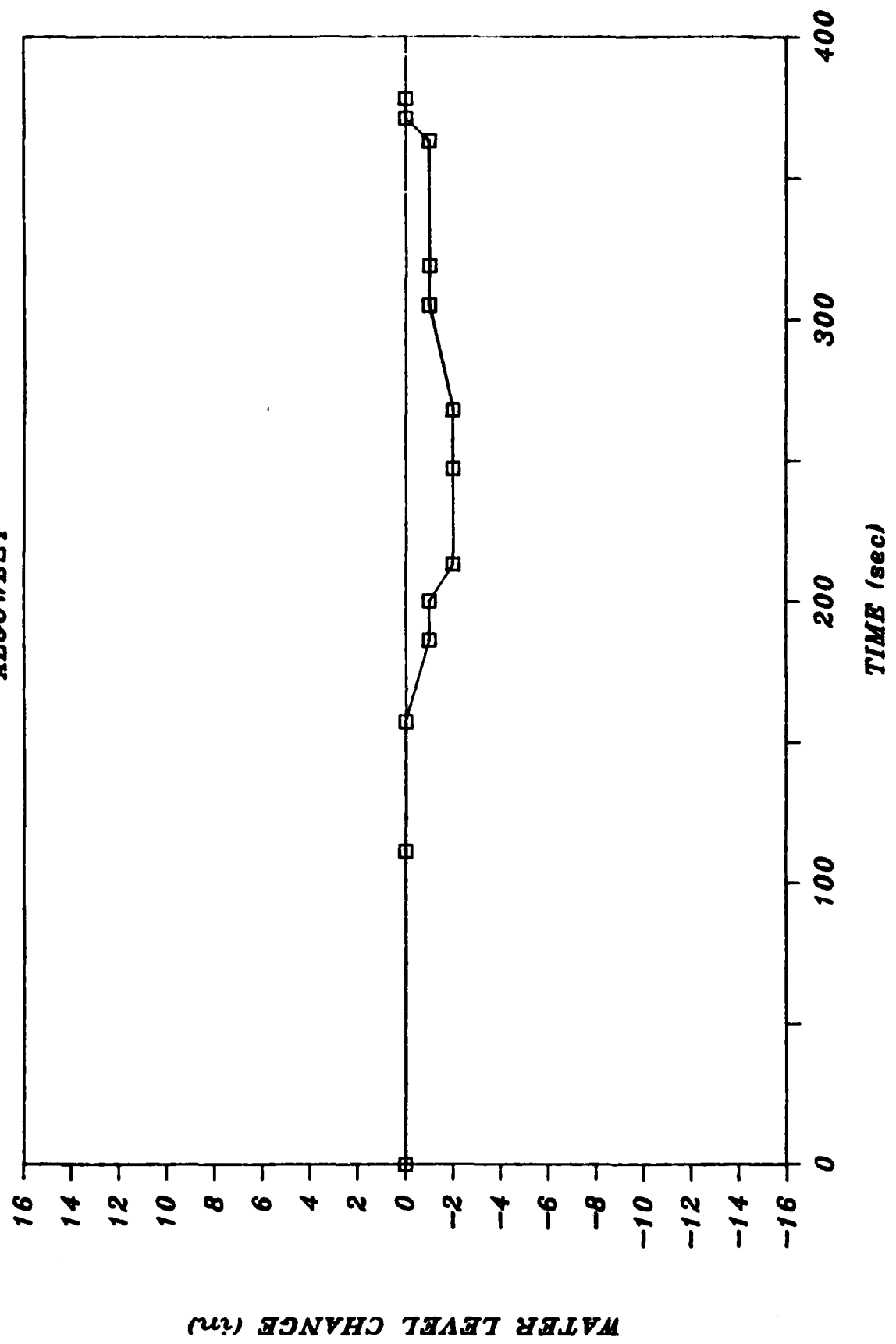


NAME OF SECTION	RIVER VIEW
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

BACKGROUND READING in inches = 26

BA69

RIVER VIEW (green) ALGOWEST



DRAWDOWN DATA

NAME OF SECTION RIVER VIEW

DATE OF OBSERVATION 6/5/85

VESSEL NAME ALGOWEST

DIRECTION UPBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 16

VESSEL SPEED in feet/sec. = 8.49

BOW ON TIME in sec = 187

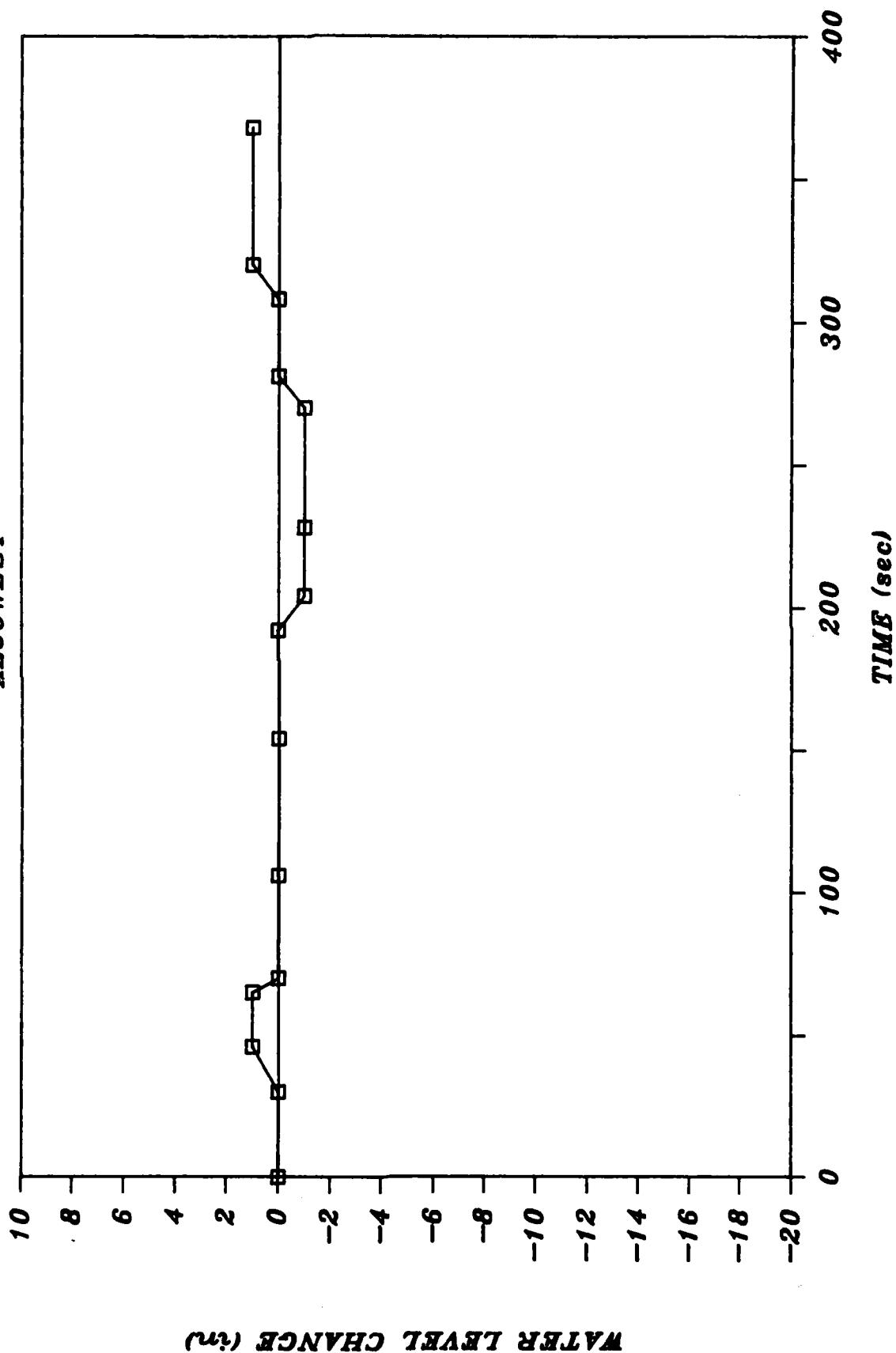
STERN ON TIME in sec = 273

DISTANCE TO STAFF GAUGE from green side in feet = 1755

BACKGROUND READING in inches = 22

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	22.0	0.0
2	30.0	22.0	0.0
3	46.0	23.0	1.0
4	65.0	23.0	1.0
5	70.0	22.0	0.0
6	106.0	22.0	0.0
7	154.0	22.0	0.0
8	192.0	22.0	0.0
9	204.0	21.0	-1.0
10	228.0	21.0	-1.0
11	270.0	21.0	-1.0
12	281.0	22.0	0.0
13	308.0	22.0	0.0
14	320.0	23.0	1.0
15	368.0	23.0	1.0

RIVER VIEW (red) ALGOWEST



NAME OF SECTION	RIVER VIEW
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

DATE OF OBSERVATION 6/5/85

DIRECTION	DOWNBOUND
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

VESSEL BEAM in feet = 105

VESSEL SPEED in feet/sec. = 11.1

STERN ON TIME in sec = 181

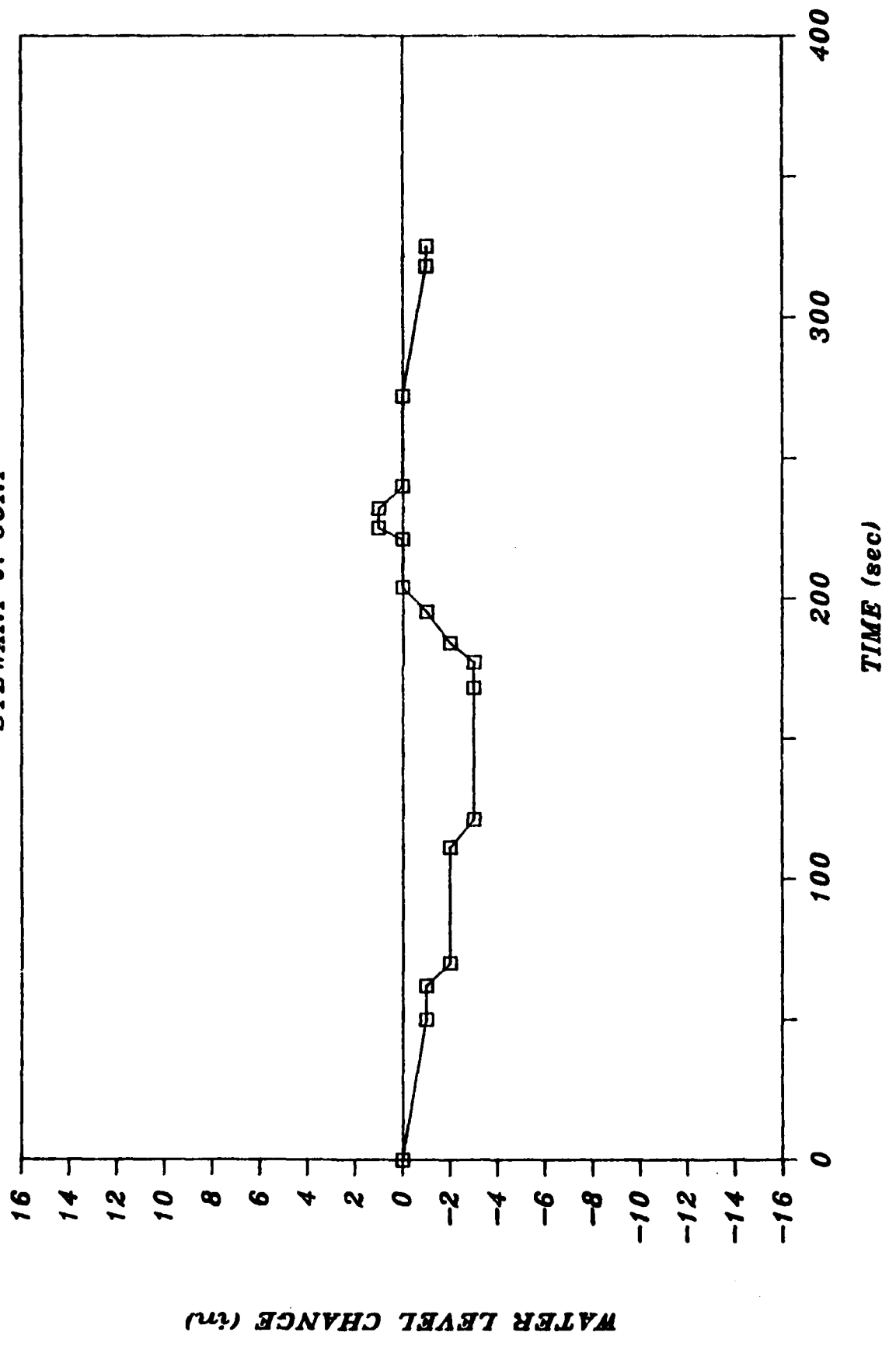
DISTANCE TO STAFF GAUGE from green side in feet = 40

BACKGROUND READING in inches = 25

BA73

RIVER VIEW (green)

STEWART J. CORT



DRAWDOWN DATA

NAME OF SECTION	RIVER VIEW
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

DATE OF OBSERVATION 6/5/85

VESSEL NAME STEWART J. CORT

DIRECTION	DOWNBOUND
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

VESSEL LENGTH in feet = 1000

VESSEL BEAM in feet = 105

VESSEL DRAFT in feet = 27

VESSEL SPEED in foot/sec. = 11.1

BOW ON TIME in sec = 91

STERN ON TIME in sec = 181

DISTANCE TO STAFF GAUGE from green side in feet = 1755

BACKGROUND READING in inches = 22

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	22.0	0.0
2	46.0	22.0	0.0
3	51.0	21.0	-1.0
4	70.0	21.0	-1.0
5	80.0	20.0	-2.0
6	94.0	20.0	-2.0
7	97.0	19.0	-3.0
8	121.0	18.0	-4.0
9	136.0	17.0	-5.0
10	150.0	18.0	-4.0
11	157.0	19.0	-3.0
12	167.0	20.0	-2.0
13	175.0	21.0	-1.0
14	190.0	23.0	1.0
15	193.0	24.0	2.0
16	203.0	24.0	2.0
17	213.0	23.0	1.0
18	223.0	21.0	-1.0
19	228.0	21.0	-1.0
20	233.0	20.0	-2.0

oo

DRAWDOWN DATA (continued)

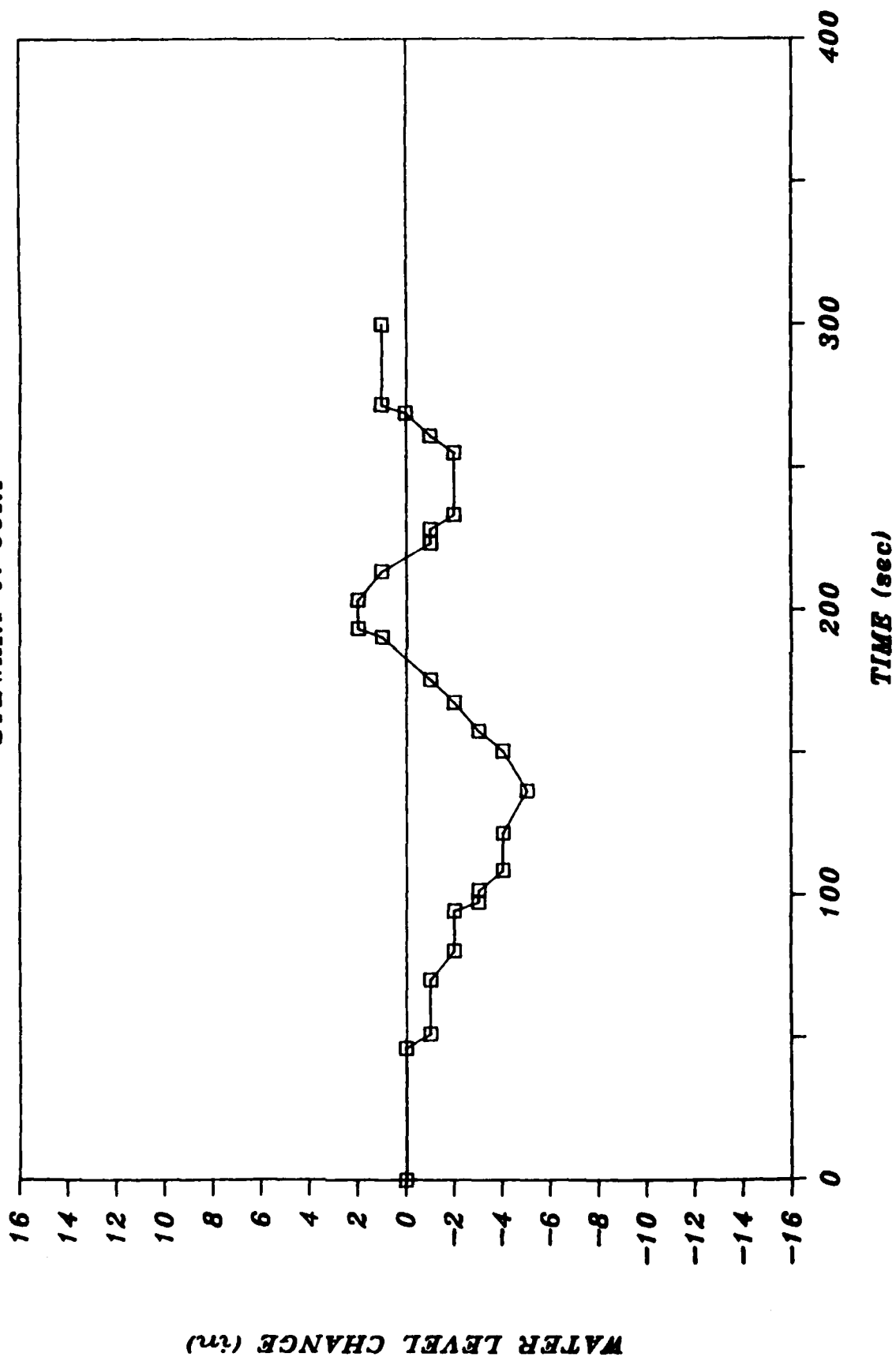
NAME OF SECTION RIVER VIEW

oo

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	255.0	20.0	-2.0
22	261.0	21.0	-1.0
23	269.0	22.0	0.0
24	270.0	23.0	1.0
25	300.0	23.0	1.0

RIVER VIEW (red)

STEWART J. CORT



DRAWDOWN DATA

NAME OF SECTION RIVER VIEW
#####

DATE OF OBSERVATION 6/5/85

VESSEL NAME BENSON FORD

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 644

VESSEL BEAM in feet = 77

VESSEL DRAFT in feet = 26.5

VESSEL SPEED in feet/sec. = 10.56

BOW ON TIME in sec = 117

STERN ON TIME in sec = 178

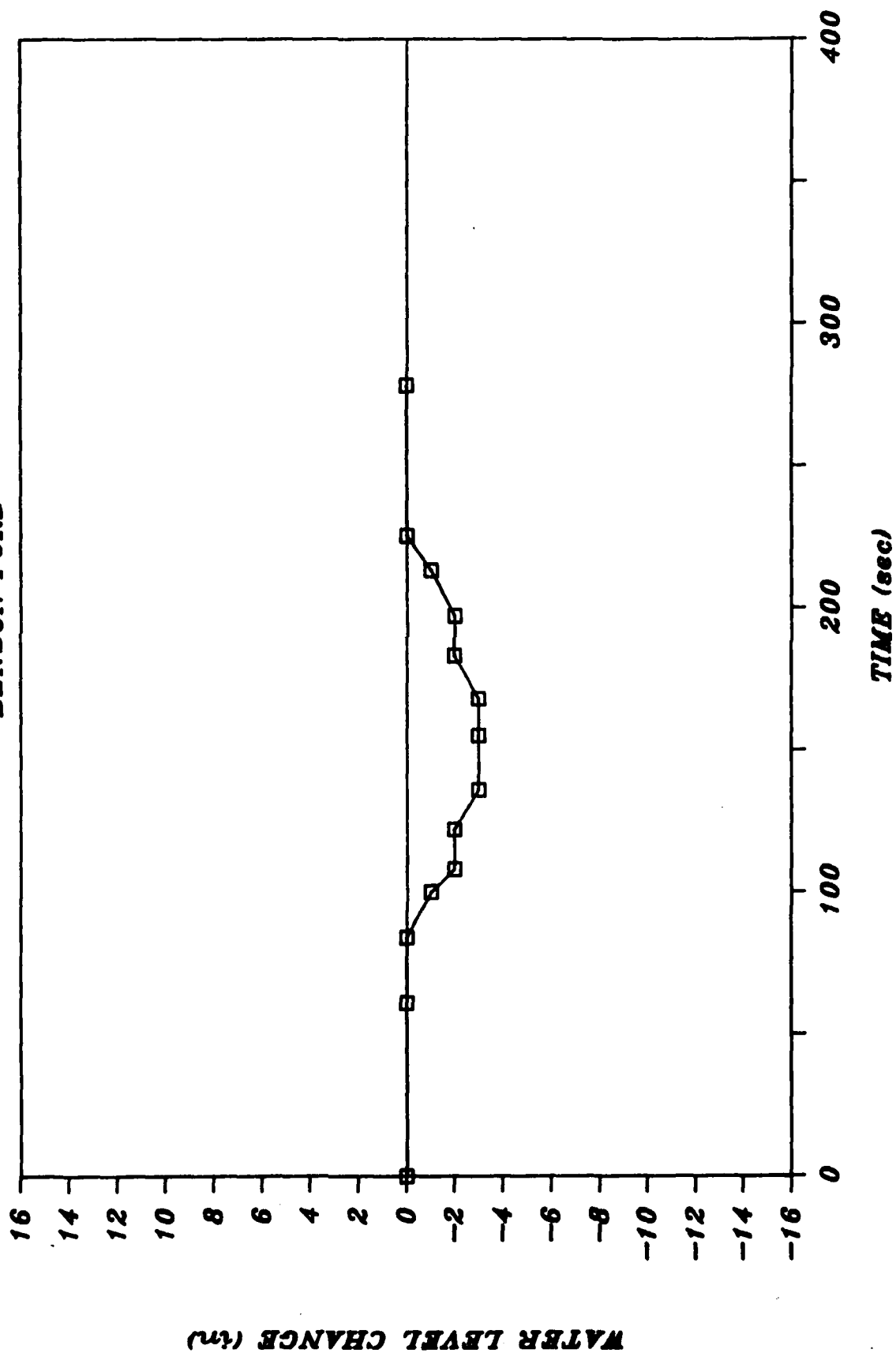
DISTANCE TO STAFF GAUGE from green side in feet = 40

BACKGROUND READING in inches = 27

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	27.0	0.0
2	61.0	27.0	0.0
3	84.0	27.0	0.0
4	100.0	26.0	-1.0
5	108.0	25.0	-2.0
6	122.0	25.0	-2.0
7	136.0	24.0	-3.0
8	155.0	24.0	-3.0
9	168.0	24.0	-3.0
10	183.0	25.0	-2.0
11	197.0	25.0	-2.0
12	213.0	26.0	-1.0
13	225.0	27.0	0.0
14	278.0	27.0	0.0

RIVER VIEW (green)

BENSON FORD



NAME OF SECTION RIVER VIEW

BACKGROUND READING in inches = 24

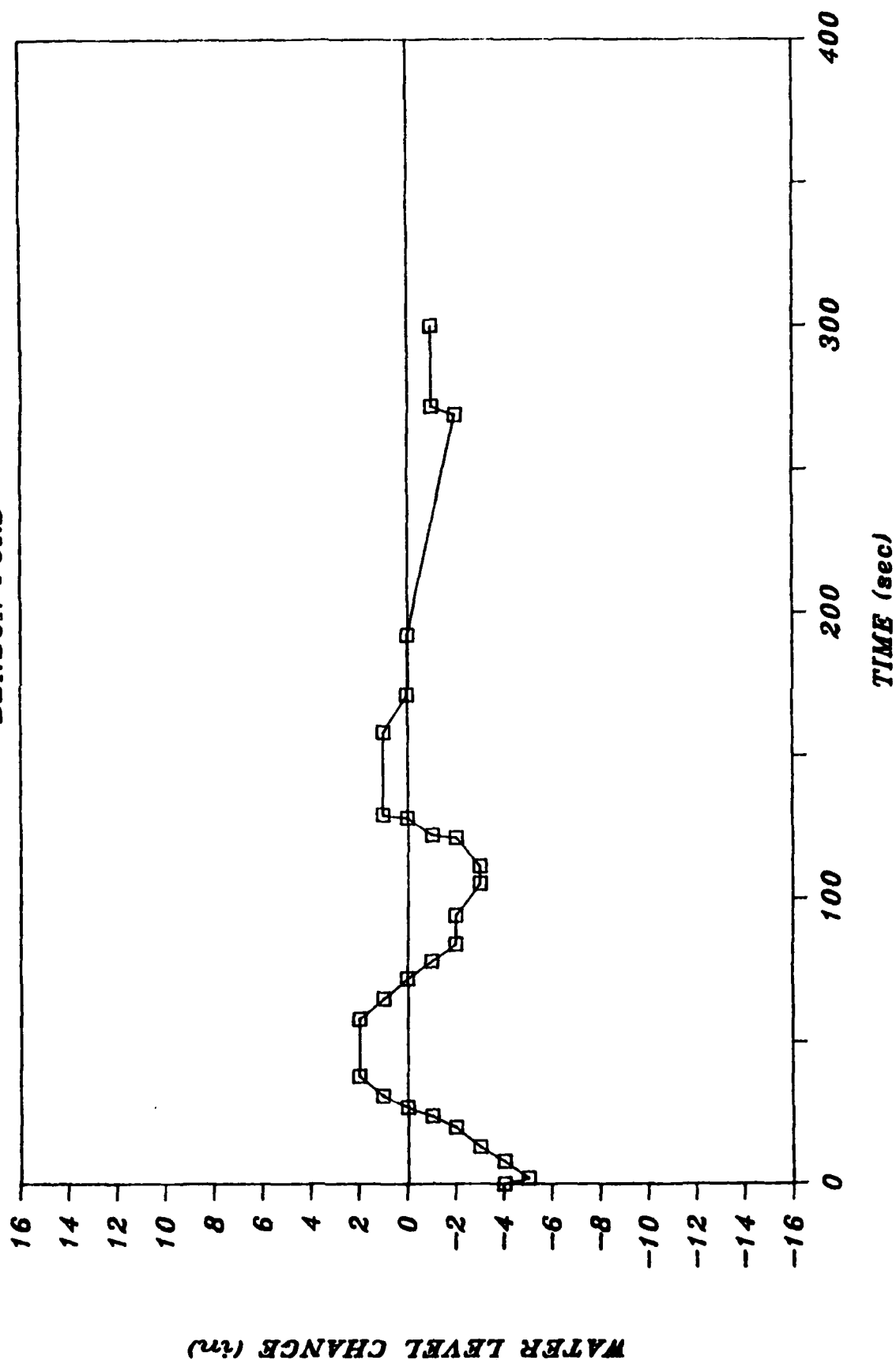
BA80

DRAWDOWN DATA (continued)

NAME OF SECTION RIVER VIEW

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	129.0	25.0	1.0
22	158.0	25.0	1.0
23	171.0	24.0	0.0
24	192.0	24.0	0.0

RIVER VIEW (red)
BENSON FORD



DRAWDOWN DATA

NAME OF SECTION RIVER VIEW

DATE OF OBSERVATION 6/5/85

VESSEL NAME MIDDLETOWN

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 18

VESSEL SPEED in feet/sec. = 12.37

BOW ON TIME in sec = 111

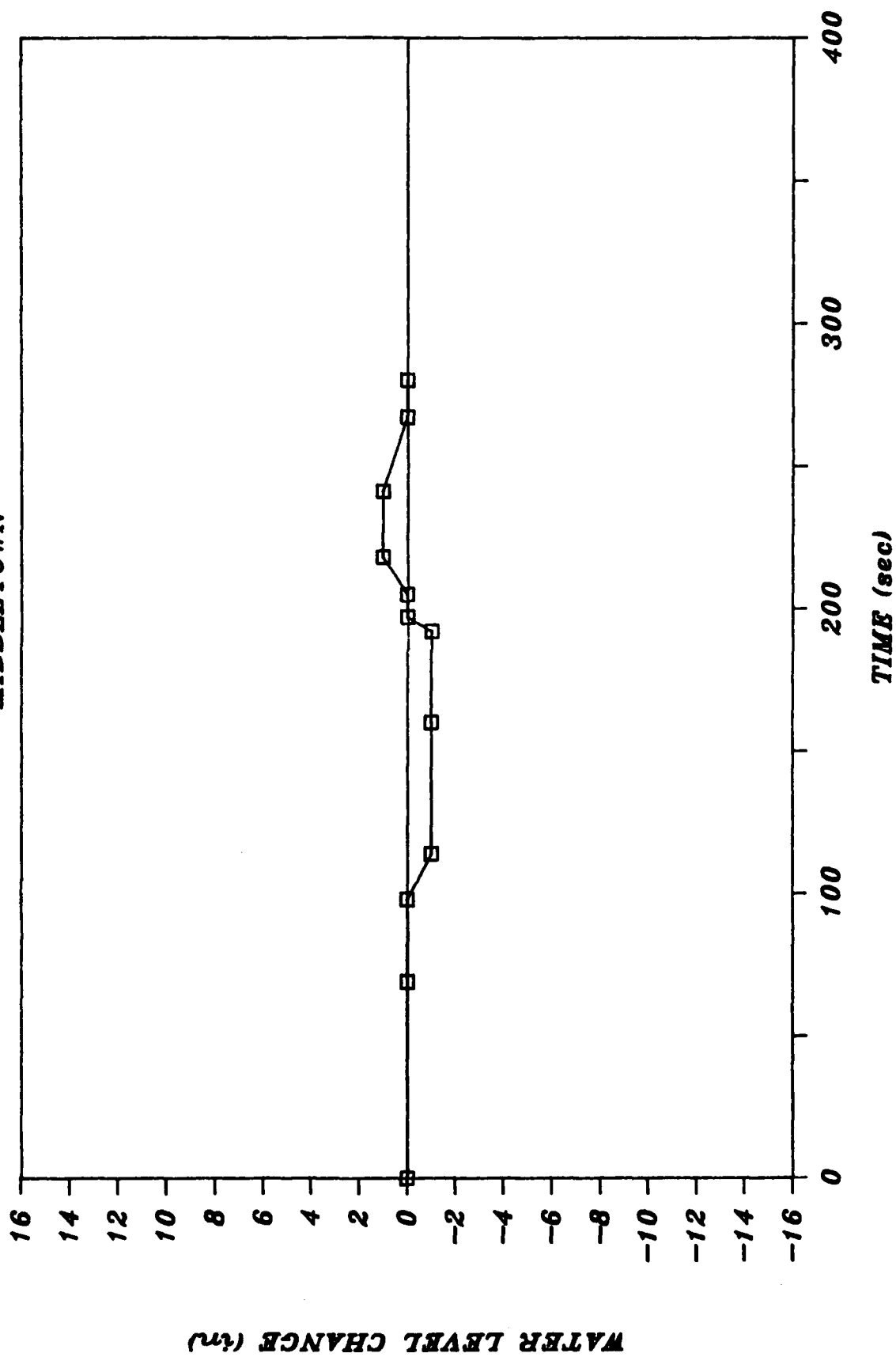
STERN ON TIME in sec = 170

DISTANCE TO STAFF GAUGE from green side in feet = 40

BACKGROUND READING in inches = 27

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	27.0	0.0
2	69.0	27.0	0.0
3	98.0	27.0	0.0
4	114.0	26.0	-1.0
5	160.0	26.0	-1.0
6	192.0	26.0	-1.0
7	197.0	27.0	0.0
8	203.0	27.0	0.0
9	218.0	28.0	1.0
10	241.0	28.0	1.0
11	267.0	27.0	0.0
12	280.0	27.0	0.0

RIVER VIEW (green) MIDDLETOWN



 DRAWDOWN DATA

NAME OF SECTION RIVER VIEW
 #####

DATE OF OBSERVATION 6/5/85

VESSEL NAME MIDDLETOWN

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 18

VESSEL SPEED in feet/sec. = 12.37

BOW ON TIME in sec = 111

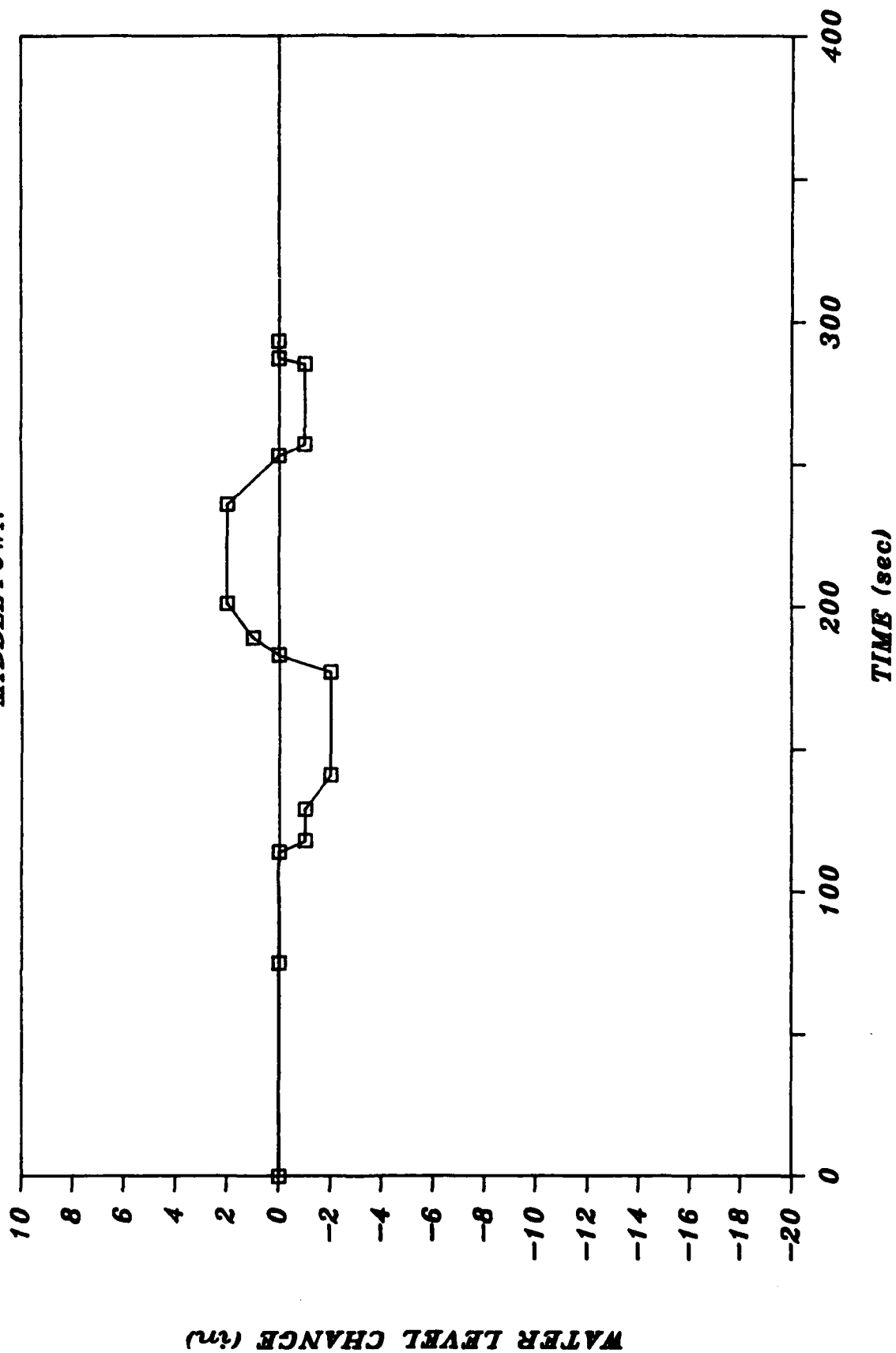
STERN ON TIME in sec = 170

DISTANCE TO STAFF GAUGE from green side in feet = 1755

BACKGROUND READING in inches = 24

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	24.0	0.0
2	75.0	24.0	0.0
3	114.0	24.0	0.0
4	118.0	23.0	-1.0
5	129.0	23.0	-1.0
6	183.0	24.0	0.0
7	189.0	25.0	1.0
8	201.0	26.0	2.0
9	236.0	26.0	2.0
10	253.0	24.0	0.0
11	257.0	23.0	-1.0
12	285.0	23.0	-1.0
13	287.0	24.0	0.0
14	293.0	24.0	0.0

RIVER VIEW (red) MIDDLETOWN



SAND ISLAND

DRAWDOWN DATA

NAME OF SECTION SAND ISLAND
#####

DATE OF OBSERVATION 10/30/84

VESSEL NAME BENSON FORD

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 644

VESSEL BEAM in feet = 67

VESSEL DRAFT in feet = 25

VESSEL SPEED in feet/sec. = 10.7

BOW ON TIME in sec = 70

STERN ON TIME in sec = 130

DISTANCE TO STAFF GAUGE from green side in feet = 2800

BACKGROUND READING in inches = 15

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	15.0	0.0
2	4.0	15.0	0.0
3	13.0	15.0	0.0
4	22.0	15.0	0.0
5	32.0	15.0	0.0
6	45.0	15.0	0.0
7	52.0	15.0	0.0
8	63.0	15.0	0.0
9	72.0	15.0	0.0
10	83.0	15.0	0.0
11	90.0	14.0	-1.0
12	93.0	13.0	-2.0
13	97.0	12.5	-2.5
14	100.0	12.0	-3.0
15	103.0	11.5	-3.5
16	105.0	11.0	-4.0
17	107.0	10.5	-4.5
18	108.0	10.0	-5.0
19	110.0	9.5	-5.5
20	111.0	9.0	-6.0

DRAWDOWN DATA (continued)

NAME OF SECTION SAND ISLAND

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	113.0	8.5	-6.5
22	115.0	8.0	-7.0
23	117.0	7.5	-7.5
24	118.0	7.0	-8.0
25	119.0	6.5	-8.5
26	120.0	6.0	-9.0
27	121.0	6.0	-9.0
28	124.0	5.5	-9.5
29	125.0	5.0	-10.0
30	127.0	4.5	-10.5
31	129.0	4.0	-11.0
32	130.0	3.5	-11.5
33	131.0	3.0	-12.0
34	133.0	2.5	-12.5
35	135.0	2.0	-13.0
36	137.0	0.0	-15.0
37	139.0	0.0	-15.0
38	144.0	0.0	-15.0
39	145.0	1.0	-14.0
40	152.0	1.0	-14.0
41	154.0	2.0	-13.0
42	155.0	3.0	-12.0
43	157.0	5.0	-10.0
44	158.0	8.0	-7.0
45	160.0	10.0	-5.0
46	161.0	12.0	-3.0
47	162.0	14.0	-1.0
48	163.0	13.0	-2.0
49	165.0	13.0	-2.0
50	166.0	13.0	-2.0
51	168.0	13.0	-2.0
52	170.0	15.0	0.0
53	171.0	16.0	1.0
54	173.0	17.0	2.0
55	174.0	18.0	3.0
56	175.0	19.0	4.0
57	176.0	21.0	6.0
58	177.0	22.0	7.0
59	178.0	23.0	8.0
60	178.0	24.0	9.0
61	180.0	25.0	10.0
62	182.0	24.0	9.0
63	185.0	24.0	9.0
64	188.0	25.0	10.0

oo

DRAWDOWN DATA (continued)

NAME OF SECTION SAND ISLAND

oo

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
65	190.0	26.0	11.0
66	192.0	27.0	12.0
67	193.0	28.0	13.0
68	195.0	27.0	12.0
69	197.0	26.0	11.0
70	198.0	24.0	9.0
71	199.0	23.0	8.0
72	200.0	22.0	7.0
73	201.0	21.0	6.0
74	203.0	20.0	5.0
75	205.0	19.0	4.0
76	206.0	18.0	3.0
77	207.0	17.0	2.0
78	209.0	16.0	1.0
79	210.0	15.0	0.0
80	211.0	14.0	-1.0
81	212.0	13.0	-2.0
82	213.0	12.0	-3.0
83	216.0	11.0	-4.0
84	218.0	12.0	-3.0
85	220.0	13.0	-2.0
86	221.0	14.0	-1.0
87	223.0	14.0	-1.0
88	226.0	13.0	-2.0
89	227.0	12.0	-3.0
90	228.0	11.0	-4.0
91	230.0	10.0	-5.0
92	231.0	9.0	-6.0
93	234.0	9.5	-5.5
94	237.0	10.0	-5.0
95	240.0	10.5	-4.5
96	241.0	12.0	-3.0
97	243.0	13.0	-2.0
98	245.0	14.0	-1.0
99	247.0	14.0	-1.0
100	253.0	13.0	-2.0
101	254.0	13.0	-2.0
102	258.0	13.5	-1.5
103	261.0	14.0	-1.0
104	267.0	13.0	-2.0
105	269.0	12.0	-3.0
106	272.0	11.0	-4.0
107	273.0	10.0	-5.0
108	275.0	9.0	-6.0

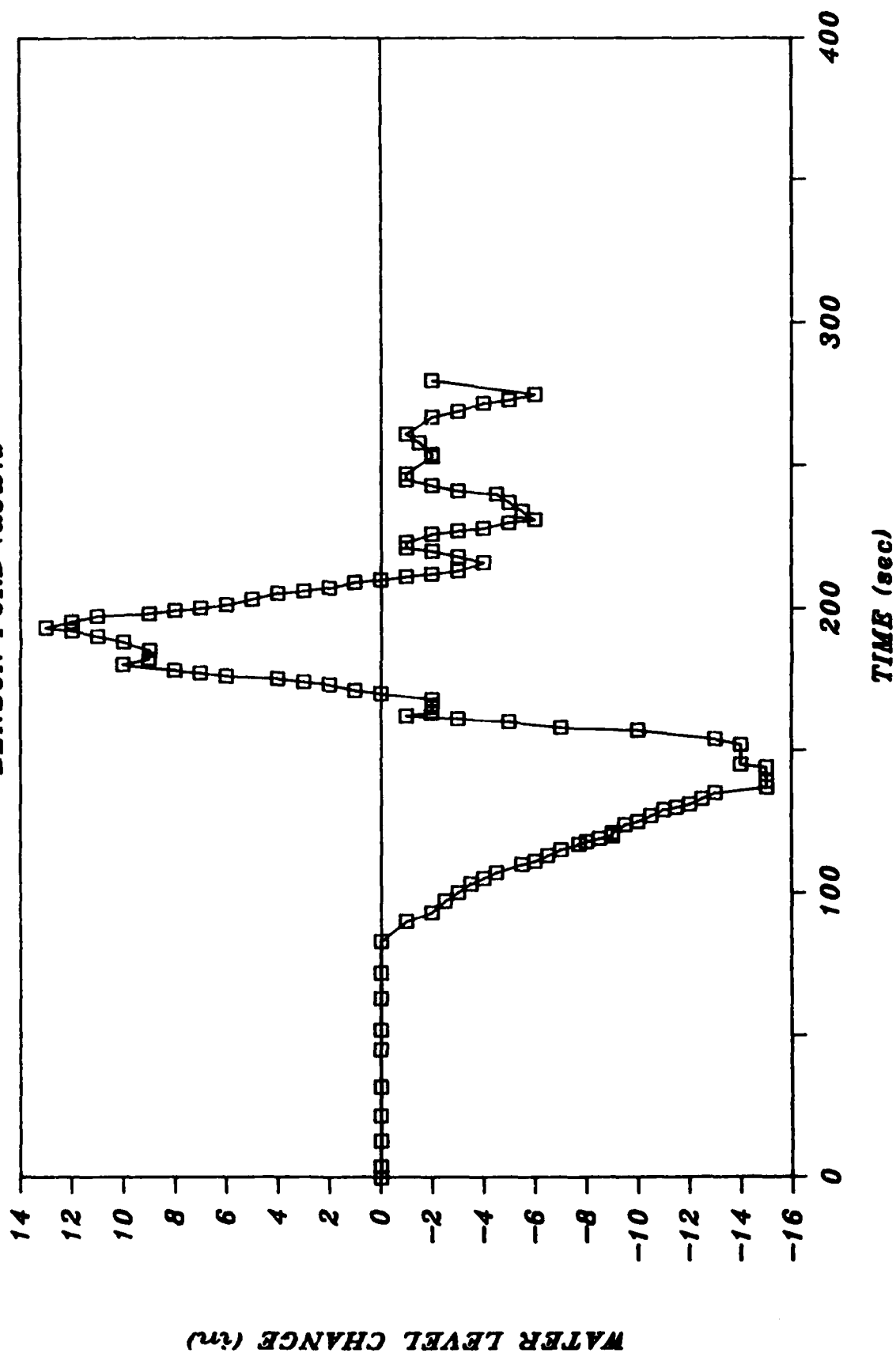
DRAWDOWN DATA (continued)

[illegible]

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
109	280.0	13.0	-2.0

SAND ISLAND 10/30/84

BENSON FORD (down)



 DRAWDOWN DATA

NAME OF SECTION SAND ISLAND
 #####

DATE OF OBSERVATION 11/14/84

VESSEL NAME LEWIS WILSON FOY

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 1000

VESSEL BEAM in feet = 105

VESSEL DRAFT in feet = 27.5

VESSEL SPEED in feet/sec. = 9.7

BOW ON TIME in sec = 39

STERN ON TIME in sec = 142

DISTANCE TO STAFF GAUGE from green side in feet = 2800

BACKGROUND READING in inches = 24

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	24.0	0.0
2	31.0	24.0	0.0
3	52.0	22.5	-1.5
4	55.0	21.0	-3.0
5	58.0	21.5	-2.5
6	61.0	20.0	-4.0
7	63.0	20.0	-4.0
8	65.0	19.5	-4.5
9	74.0	19.5	-4.5
10	80.0	18.0	-6.0
11	82.0	17.0	-7.0
12	83.0	16.0	-8.0
13	90.0	15.0	-9.0
14	92.0	14.0	-10.0
15	115.0	13.0	-11.0
16	117.0	12.0	-12.0
17	121.0	11.0	-13.0
18	125.0	10.0	-14.0
19	128.0	10.5	-13.5
20	131.0	10.5	-13.5

DRAWDOWN DATA (continued)

NAME OF SECTION SAND ISLAND

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	135.0	10.0	-14.0
22	151.0	9.0	-15.0
23	153.0	10.0	-14.0
24	156.0	11.0	-13.0
25	157.0	12.0	-12.0
26	158.0	13.0	-11.0
27	159.0	14.0	-10.0
28	160.0	15.0	-9.0
29	162.0	16.0	-8.0
30	163.0	17.0	-7.0
31	164.0	18.0	-6.0
32	165.0	19.0	-5.0
33	166.0	20.0	-4.0
34	167.0	22.0	-2.0
35	168.0	28.0	4.0
36	169.0	28.0	4.0
37	181.0	29.0	5.0
38	183.0	30.0	6.0
39	184.0	30.0	6.0
40	186.0	35.0	11.0
41	187.0	30.0	6.0
42	191.0	31.0	7.0
43	194.0	31.0	7.0
44	198.0	30.0	6.0
45	201.0	29.0	5.0
46	203.0	28.0	4.0
47	210.0	26.0	2.0
48	212.0	26.0	2.0
49	214.0	25.0	1.0
50	222.0	24.0	0.0
51	242.0	24.0	0.0
52	253.0	23.0	-1.0
53	255.0	22.0	-2.0
54	260.0	20.0	-4.0
55	263.0	20.5	-3.5
56	266.0	20.0	-4.0
57	268.0	19.5	-4.5
58	269.0	19.5	-4.5
59	272.0	20.0	-4.0
60	279.0	20.0	-4.0
61	299.0	22.0	-2.0
62	302.0	23.0	-1.0
63	354.0	22.5	-1.5
64	379.0	24.0	0.0

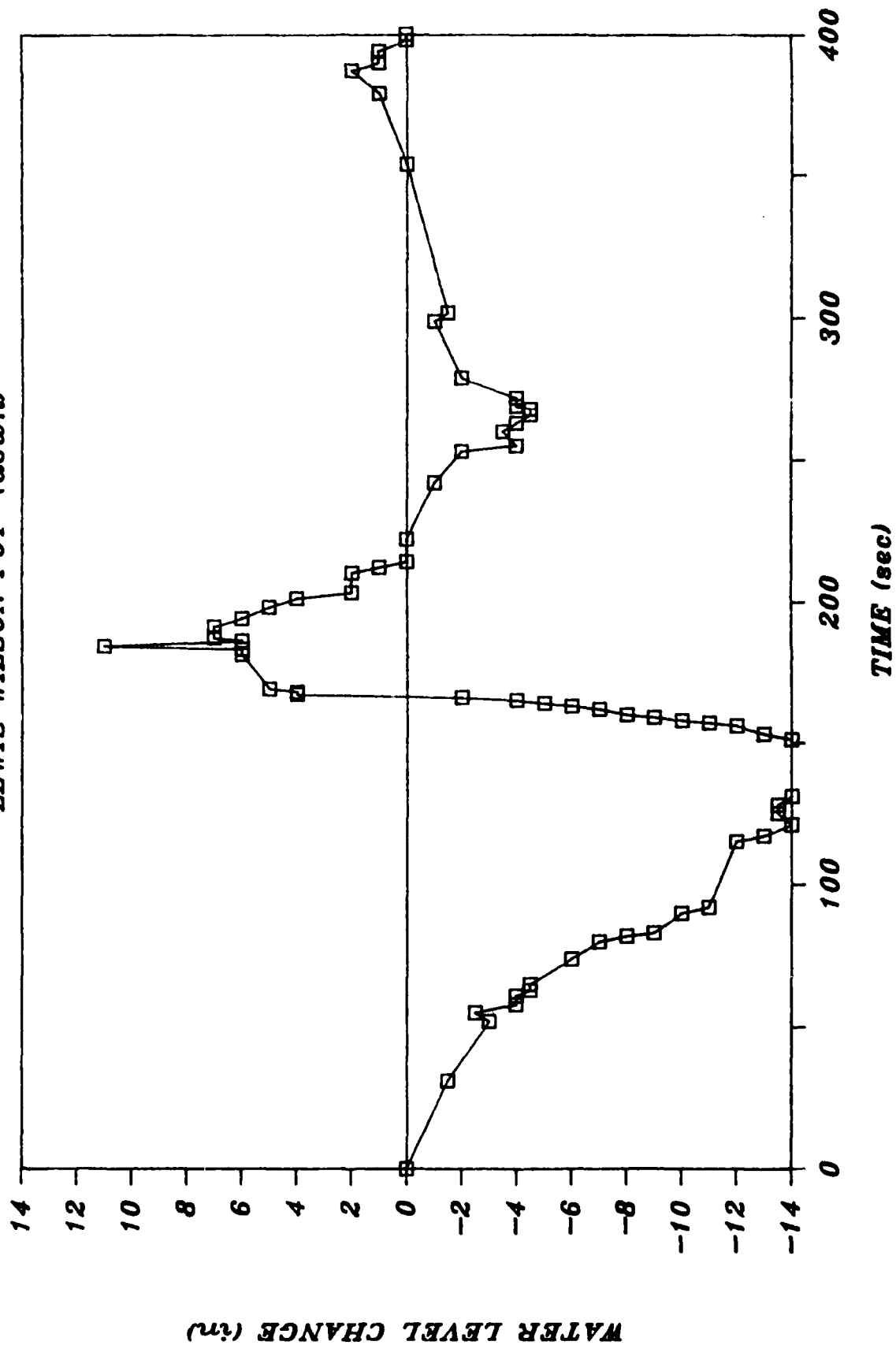
DRAWDOWN DATA (continued)

NAME OF SECTION	SAND ISLAND
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
65	387.0	25.0	1.0
66	390.0	26.0	2.0
67	394.0	25.0	1.0
68	398.0	25.0	1.0
69	400.0	24.0	0.0
70	431.0	24.0	0.0
71	435.0	24.5	0.5

SAND ISLAND 11/14/84

LEWIS WILSON FOY (down)



DRAWDOWN DATA

NAME OF SECTION SAND ISLAND

DATE OF OBSERVATION 11/14/84

VESSEL NAME J. N. McWATTERS

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 723

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 25.5

VESSEL SPEED in feet/sec. = 12.0

BOW ON TIME in sec = 101

STERN ON TIME in sec = 161

DISTANCE TO STAFF GAUGE from green side in feet = 55

BACKGROUND READING in inches = 13

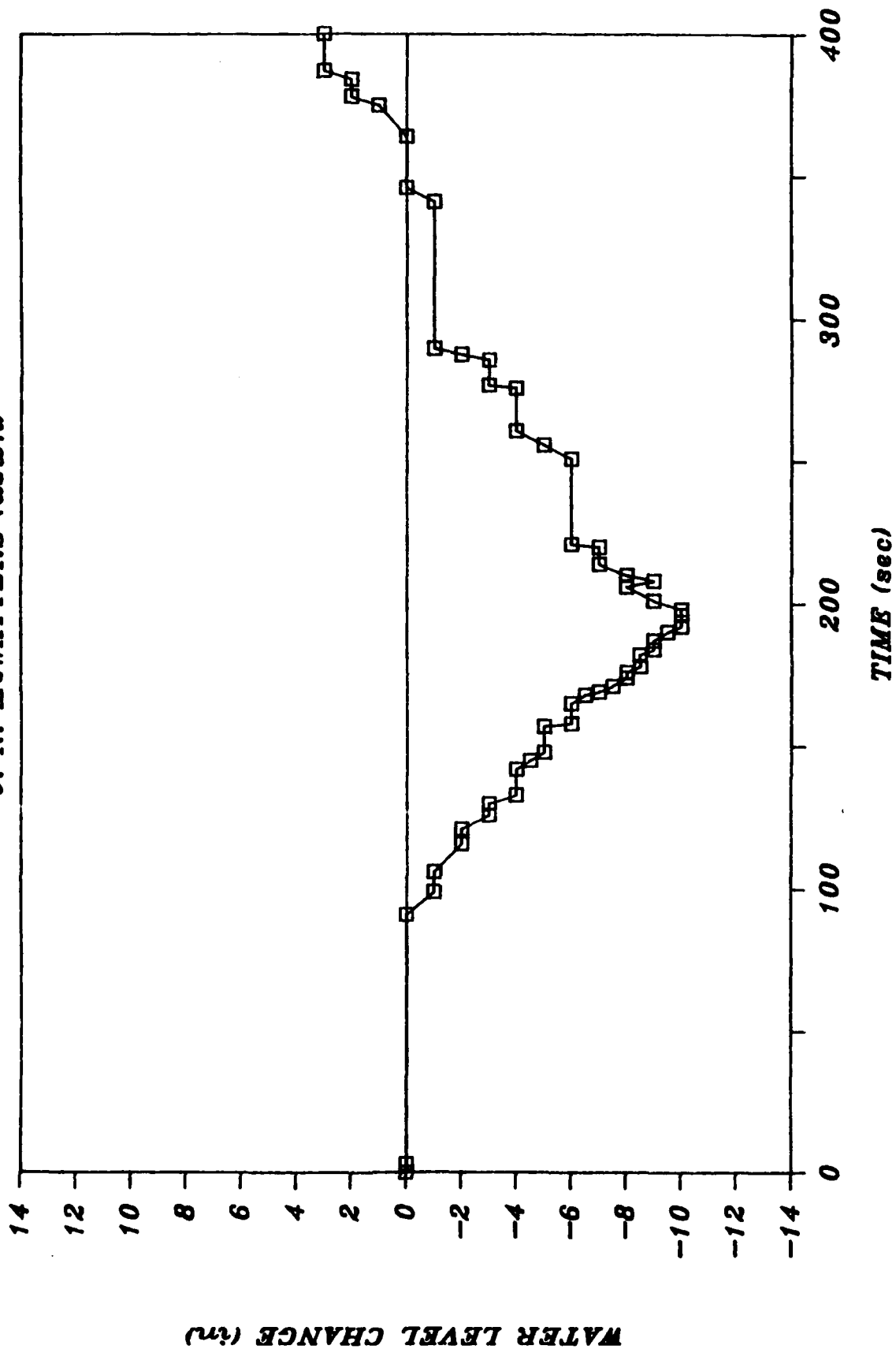
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	13.0	0.0
2	3.0	13.0	0.0
3	91.0	13.0	0.0
4	99.0	12.0	-1.0
5	106.0	12.0	-1.0
6	116.0	11.0	-2.0
7	121.0	11.0	-2.0
8	126.0	10.0	-3.0
9	130.0	10.0	-3.0
10	133.0	9.0	-4.0
11	142.0	9.0	-4.0
12	145.0	8.5	-4.5
13	148.0	8.0	-5.0
14	157.0	8.0	-5.0
15	158.0	7.0	-6.0
16	165.0	7.0	-6.0
17	168.0	6.5	-6.5
18	169.0	6.0	-7.0
19	171.0	5.5	-7.5
20	174.0	5.0	-8.0

NAME OF SECTION	SAND ISLAND
<div style="background-color: black; height: 1em; width: 100%;"></div>	

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	176.0	5.0	-8.0
22	178.0	4.5	-8.5
23	182.0	4.5	-8.5
24	184.0	4.0	-9.0
25	187.0	4.0	-9.0
26	190.0	3.5	-9.5
27	192.0	3.0	-10.0
28	196.0	3.0	-10.0
29	198.0	3.0	-10.0
30	201.0	4.0	-9.0
31	206.0	5.0	-8.0
32	208.0	4.0	-9.0
33	210.0	5.0	-8.0
34	214.0	6.0	-7.0
35	220.0	6.0	-7.0
36	221.0	7.0	-6.0
37	251.0	7.0	-6.0
38	256.0	8.0	-5.0
39	261.0	9.0	-4.0
40	276.0	9.0	-4.0
41	277.0	10.0	-3.0
42	286.0	10.0	-3.0
43	288.0	11.0	-2.0
44	290.0	12.0	-1.0
45	341.0	12.0	-1.0
46	346.0	13.0	0.0
47	364.0	13.0	0.0
48	375.0	14.0	1.0
49	378.0	15.0	2.0
50	384.0	15.0	2.0
51	387.0	16.0	3.0
52	405.0	16.0	3.0
53	409.0	15.0	2.0
54	412.0	14.0	1.0
55	416.0	13.0	0.0
56	450.0	13.0	0.0

SAND ISLAND 11/14/84

J. N. McWATERS (down)



 DRAWDOWN DATA

NAME OF SECTION SAND ISLAND
 #####

DATE OF OBSERVATION 11/14/84

VESSEL NAME J. N. McWATTERS

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 723

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 25.5

VESSEL SPEED in feet/sec. = 12.0

BOW ON TIME in sec = 101

STERN ON TIME in sec = 161

DISTANCE TO STAFF GAUGE from green side in feet = 1270

BACKGROUND READING in inches = 21

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	21.0	0.0
2	71.0	21.0	0.0
3	90.0	20.9	-0.1
4	95.0	20.9	-0.1
5	104.0	18.0	-3.0
6	109.0	16.4	-4.6
7	114.0	15.0	-6.0
8	122.0	14.4	-6.6
9	130.0	12.0	-9.0
10	140.0	10.8	-10.2
11	142.0	10.8	-10.2
12	149.0	12.0	-9.0
13	156.0	13.2	-7.8
14	160.0	15.0	-6.0
15	163.0	15.0	-6.0
16	170.0	16.8	-4.2
17	177.0	18.0	-3.0
18	198.0	18.0	-3.0
19	205.0	19.2	-1.8
20	213.0	19.2	-1.8

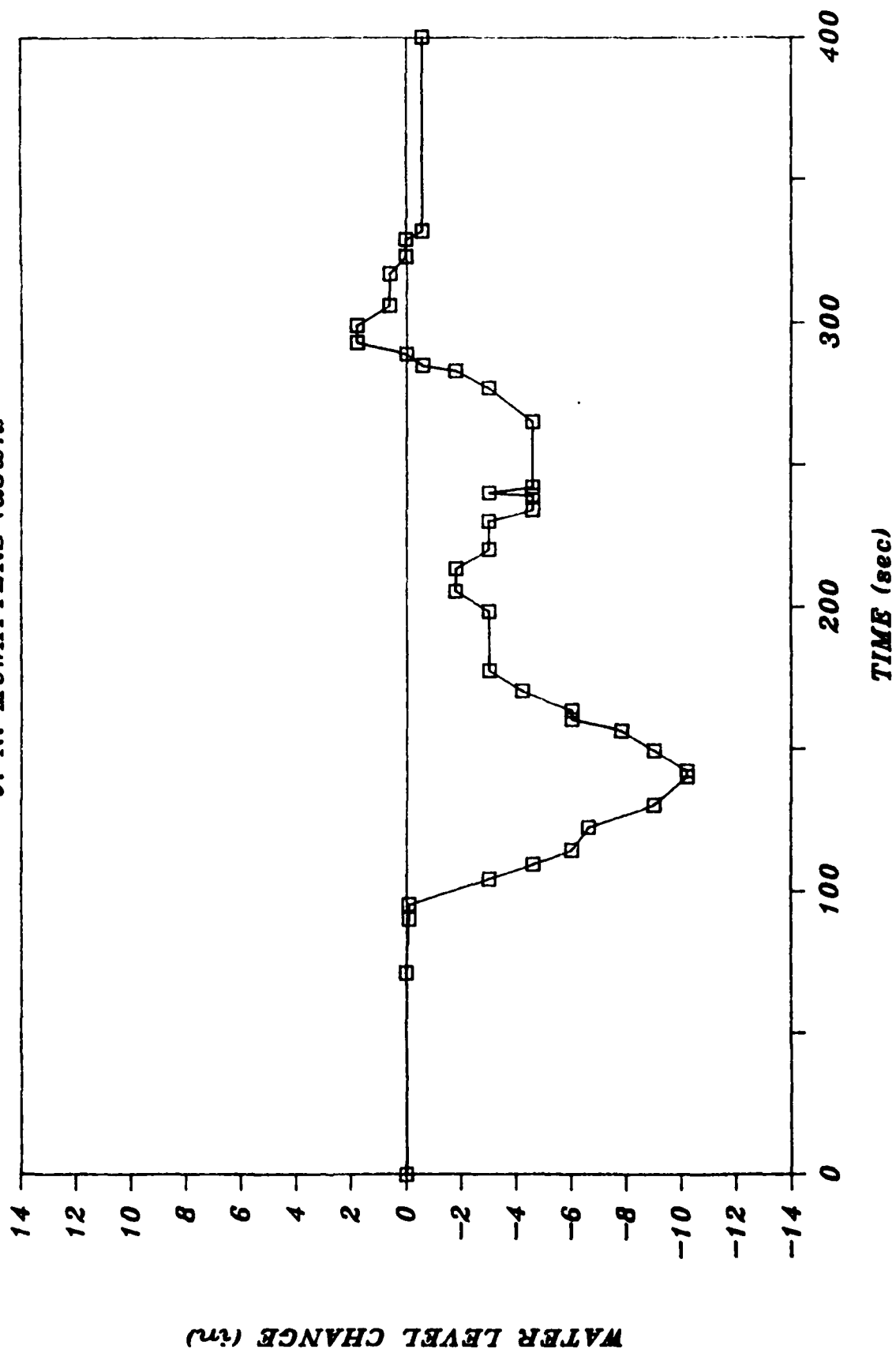
DRAWDOWN DATA (continued)

NAME OF SECTION SAND ISLAND
#####

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	220.0	18.0	-3.0
22	230.0	18.0	-3.0
23	234.0	16.4	-4.6
24	239.0	16.4	-4.6
25	240.0	18.0	-3.0
26	242.0	16.4	-4.6
27	265.0	16.4	-4.6
28	277.0	18.0	-3.0
29	283.0	19.2	-1.8
30	285.0	20.4	-0.6
31	289.0	21.0	0.0
32	293.0	22.8	1.8
33	299.0	22.8	1.8
34	306.0	21.6	0.6
35	317.0	21.6	0.6
36	323.0	21.0	0.0
37	329.0	21.0	0.0
38	332.0	20.4	-0.6
39	420.0	20.4	-0.6
40	430.0	20.4	-0.6
41	450.0	19.8	-1.2

SAND ISLAND 11/14/84

J. N. McWATERS (down)



@@
 DRAWDOWN DATA

NAME OF SECTION SAND ISLAND
 @@

DATE OF OBSERVATION 11/14/84

VESSEL NAME J. N. McWATTERS

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 723

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 25.5

VESSEL SPEED in feet./sec. = 12.0

BOW ON TIME in sec = 101

STERN ON TIME in sec = 161

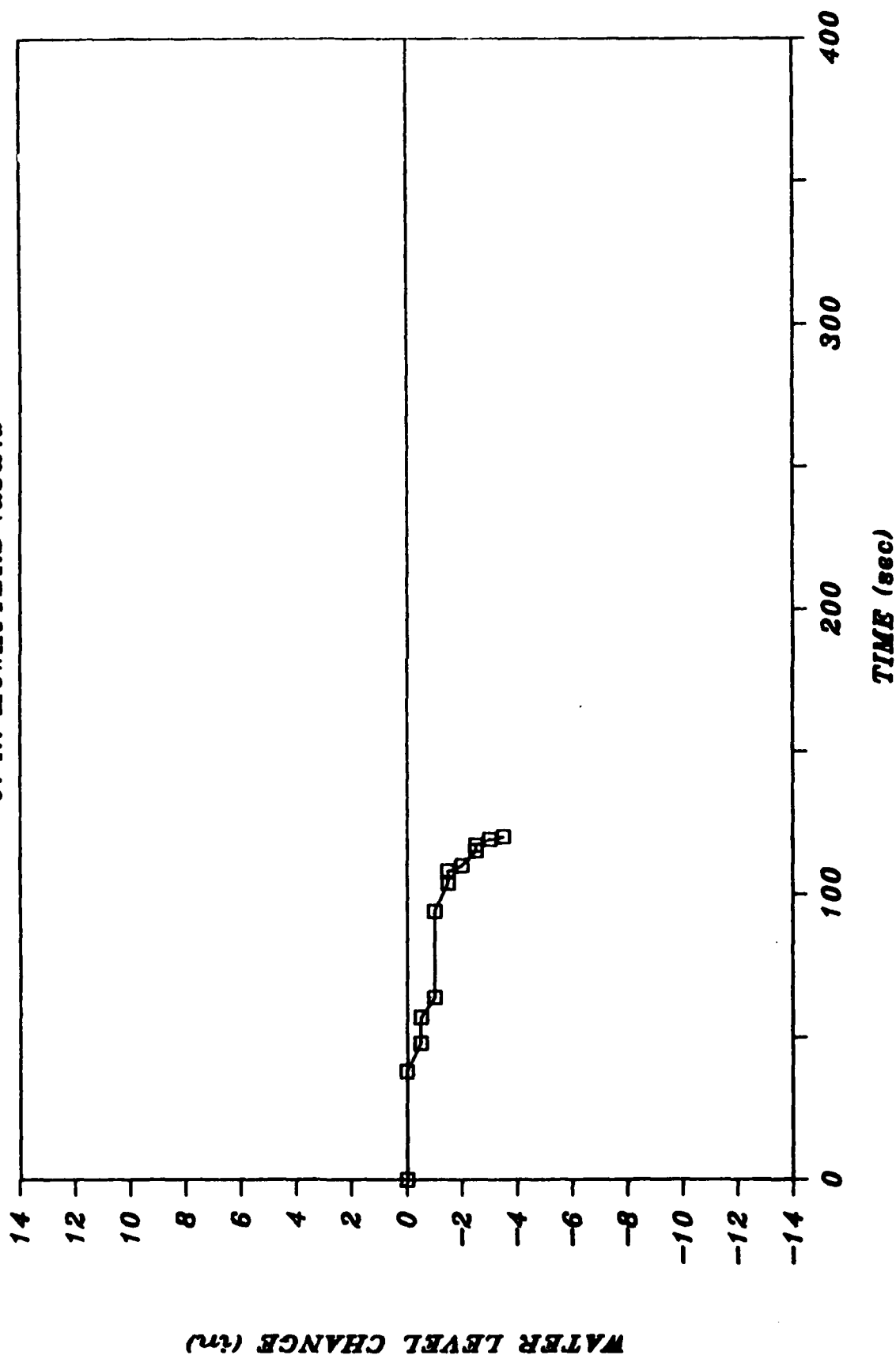
DISTANCE TO STAFF GAUGE from green side in feet = 2800

BACKGROUND READING in inches = 25.5

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	25.5	0.0
2	38.0	25.5	0.0
3	48.0	25.0	-0.5
4	57.0	25.0	-0.5
5	64.0	24.5	-1.0
6	94.0	24.5	-1.0
7	104.0	24.0	-1.5
8	108.0	24.0	-1.5
9	110.0	23.5	-2.0
10	115.0	23.0	-2.5
11	117.0	23.0	-2.5
12	119.0	22.5	-3.0
13	120.0	22.0	-3.5

SAND ISLAND 11/14/84

J. N. McWATERS (down)



DRAWDOWN DATA

NAME OF SECTION SAND ISLAND

DATE OF OBSERVATION 11/14/84

VESSEL NAME JADE KIM

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 505

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 25.5

VESSEL SPEED in feet/sec. = 13.3

BOW ON TIME in sec = 65

STERN ON TIME in sec = 103

DISTANCE TO STAFF GAUGE from green side in feet = 55

BACKGROUND READING in inches = 14

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	14.0	0.0
2	5.0	14.0	0.0
3	57.0	14.0	0.0
4	71.0	15.0	1.0
5	78.0	14.0	0.0
6	85.0	14.0	0.0
7	95.0	13.0	-1.0
8	104.0	12.0	-2.0
9	108.0	12.0	-2.0
10	110.0	11.0	-3.0
11	113.0	11.0	-3.0
12	118.0	10.0	-4.0
13	121.0	9.0	-5.0
14	123.0	9.0	-5.0
15	132.0	8.0	-6.0
16	134.0	8.0	-6.0
17	135.0	7.0	-7.0
18	140.0	6.0	-8.0
19	145.0	5.0	-9.0
20	147.0	5.0	-9.0

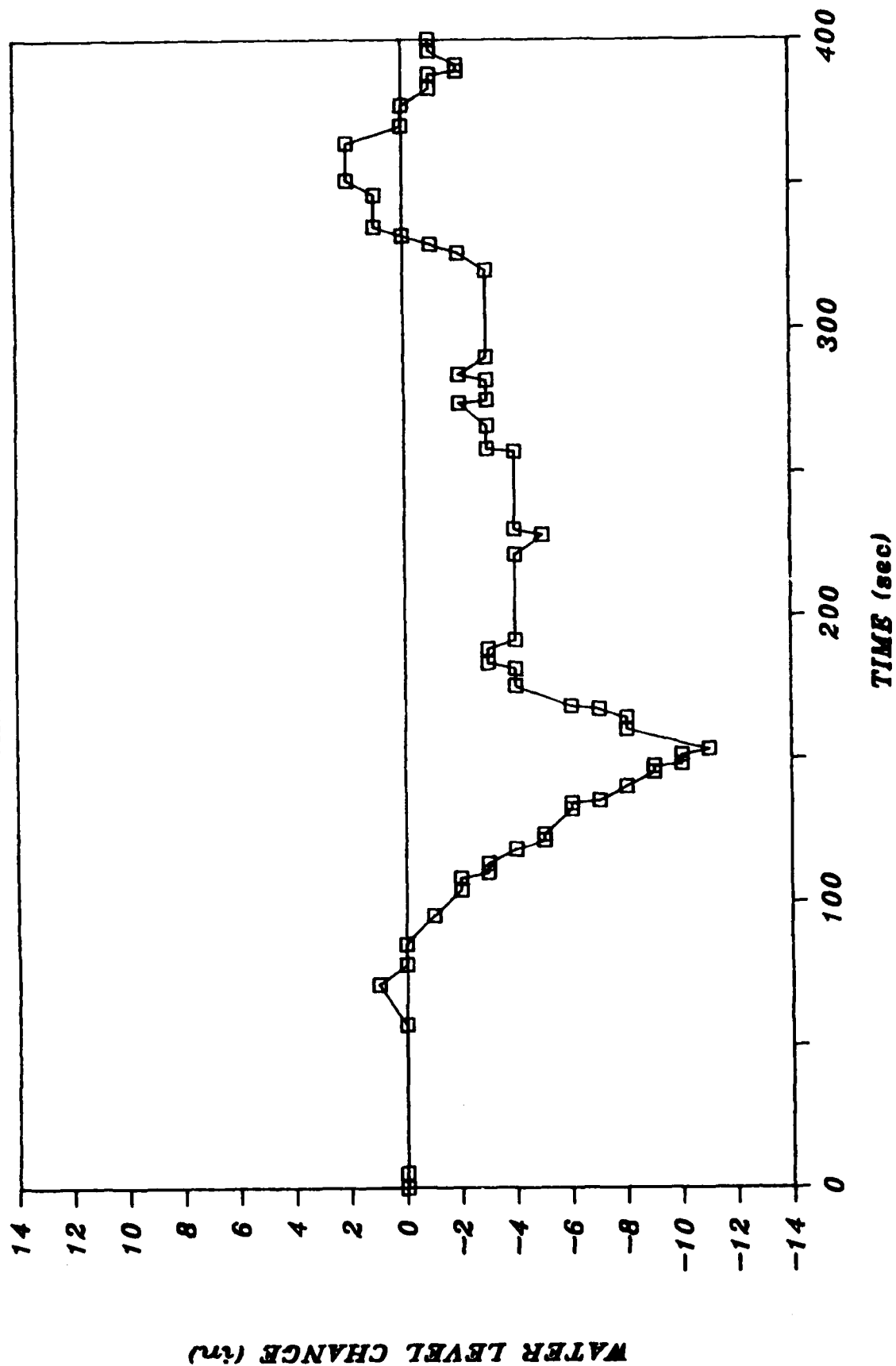
DRAWDOWN DATA (continued)

NAME OF SECTION SAND ISLAND

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	148.0	4.0	-10.0
22	151.0	4.0	-10.0
23	153.0	3.0	-11.0
24	160.0	6.0	-8.0
25	164.0	6.0	-8.0
26	167.0	15.0	1.0
27	168.0	8.0	-6.0
28	175.0	10.0	-4.0
29	181.0	10.0	-4.0
30	183.0	11.0	-3.0
31	188.0	11.0	-3.0
32	191.0	10.0	-4.0
33	221.0	10.0	-4.0
34	228.0	9.0	-5.0
35	230.0	10.0	-4.0
36	257.0	10.0	-4.0
37	258.0	11.0	-3.0
38	266.0	11.0	-3.0
39	274.0	12.0	-2.0
40	275.0	11.0	-3.0
41	282.0	11.0	-3.0
42	284.0	12.0	-2.0
43	290.0	11.0	-3.0
44	320.0	11.0	-3.0
45	326.0	12.0	-2.0
46	329.0	13.0	-1.0
47	332.0	14.0	0.0
48	335.0	15.0	1.0
49	346.0	15.0	1.0
50	351.0	16.0	2.0
51	364.0	16.0	2.0
52	370.0	14.0	0.0
53	377.0	14.0	0.0
54	383.0	13.0	-1.0
55	388.0	13.0	-1.0
56	389.0	12.0	-2.0
57	391.0	12.0	-2.0
58	396.0	13.0	-1.0
59	420.0	13.0	-1.0

SAND ISLAND 11/14/84

JADE KIM (down)



DRAWDOWN DATA

NAME OF SECTION SAND ISLAND
#####

DATE OF OBSERVATION 11/14/84

VESSEL NAME JADE KIM

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 505

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 25.5

VESSEL SPEED in feet/sec. = 13.3

BOW ON TIME in sec = 65

STERN ON TIME in sec = 103

DISTANCE TO STAFF GAUGE from green side in feet = 1270

BACKGROUND READING in inches = 21

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	21.0	0.0
2	12.0	21.6	0.6
3	51.0	21.6	0.6
4	52.0	21.0	0.0
5	57.0	21.0	0.0
6	65.0	20.4	-0.6
7	69.0	19.2	-1.8
8	73.0	18.0	-3.0
9	75.0	16.8	-4.2
10	81.0	15.6	-5.4
11	83.0	15.0	-6.0
12	84.0	14.4	-6.6
13	87.0	13.2	-7.8
14	91.0	12.0	-9.0
15	98.0	12.0	-9.0
16	102.0	15.0	-6.0
17	103.0	18.0	-3.0
18	106.0	18.0	-3.0
19	110.0	19.2	-1.8
20	113.0	19.2	-1.8

#####

DRAWDOWN DATA (continued)

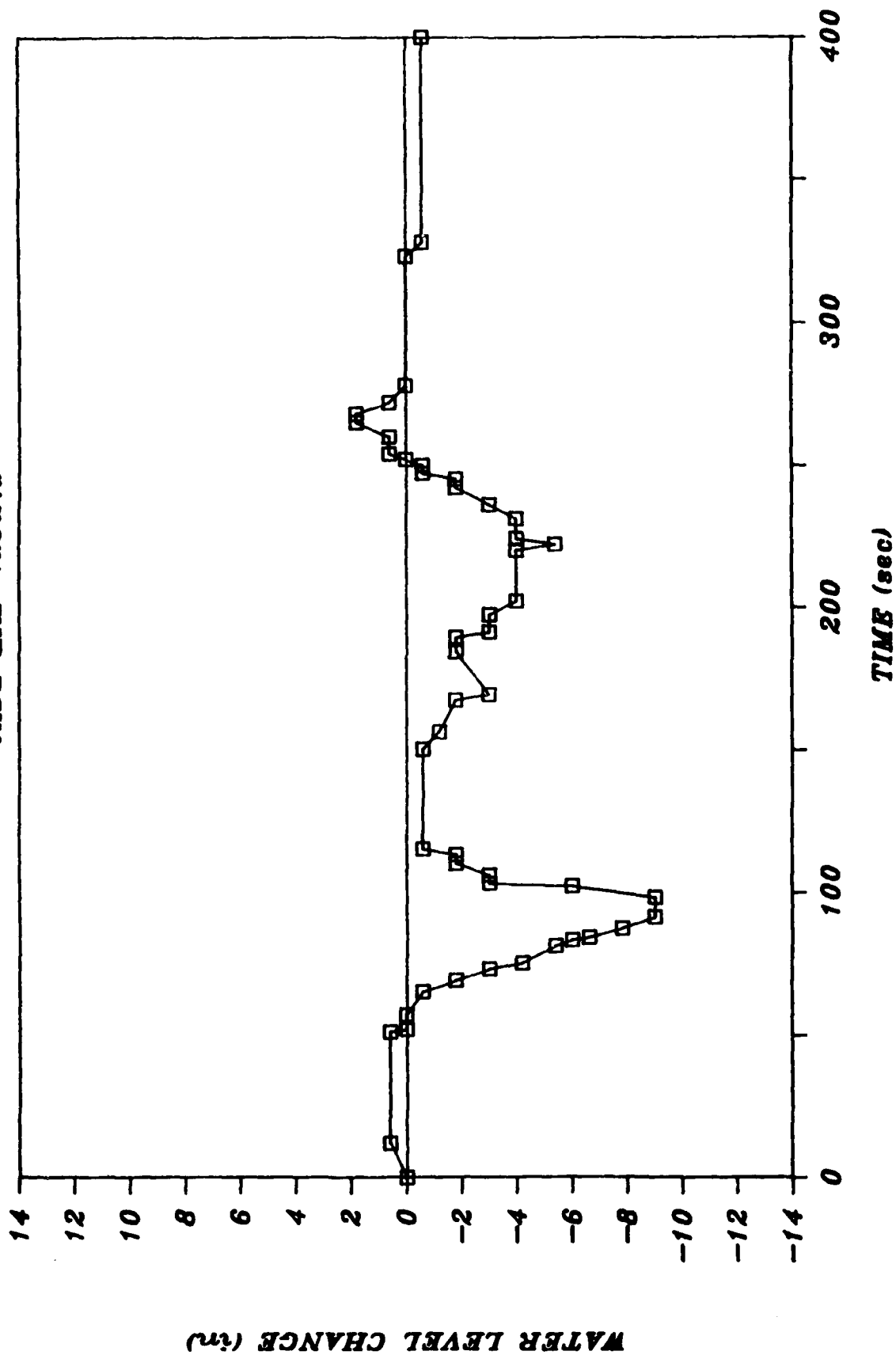
NAME OF SECTION SAND ISLAND

#####

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	115.0	20.4	-0.6
22	150.0	20.4	-0.6
23	156.0	19.8	-1.2
24	167.0	19.2	-1.8
25	169.0	18.0	-3.0
26	184.0	19.2	-1.8
27	189.0	19.2	-1.8
28	191.0	18.0	-3.0
29	197.0	18.0	-3.0
30	202.0	16.8	-4.2
31	220.0	16.8	-4.2
32	222.0	15.6	-5.4
33	224.0	16.8	-4.2
34	231.0	16.8	-4.2
35	236.0	18.0	-3.0
36	242.0	19.2	-1.8
37	245.0	19.2	-1.8
38	247.0	20.4	-0.6
39	250.0	20.4	-0.6
40	252.0	21.0	0.0
41	254.0	21.6	0.6
42	260.0	21.6	0.6
43	265.0	22.8	1.8
44	268.0	22.8	1.8
45	272.0	21.6	0.6
46	278.0	21.0	0.0
47	323.0	21.0	0.0
48	328.0	20.4	-0.6
49	420.0	20.4	-0.6

SAND ISLAND 11/14/84

JADE KIM (down)



NAME OF SECTION SAND ISLAND

BACKGROUND READING in inches = 26

BB24

#####

DRAWDOWN DATA (continued)

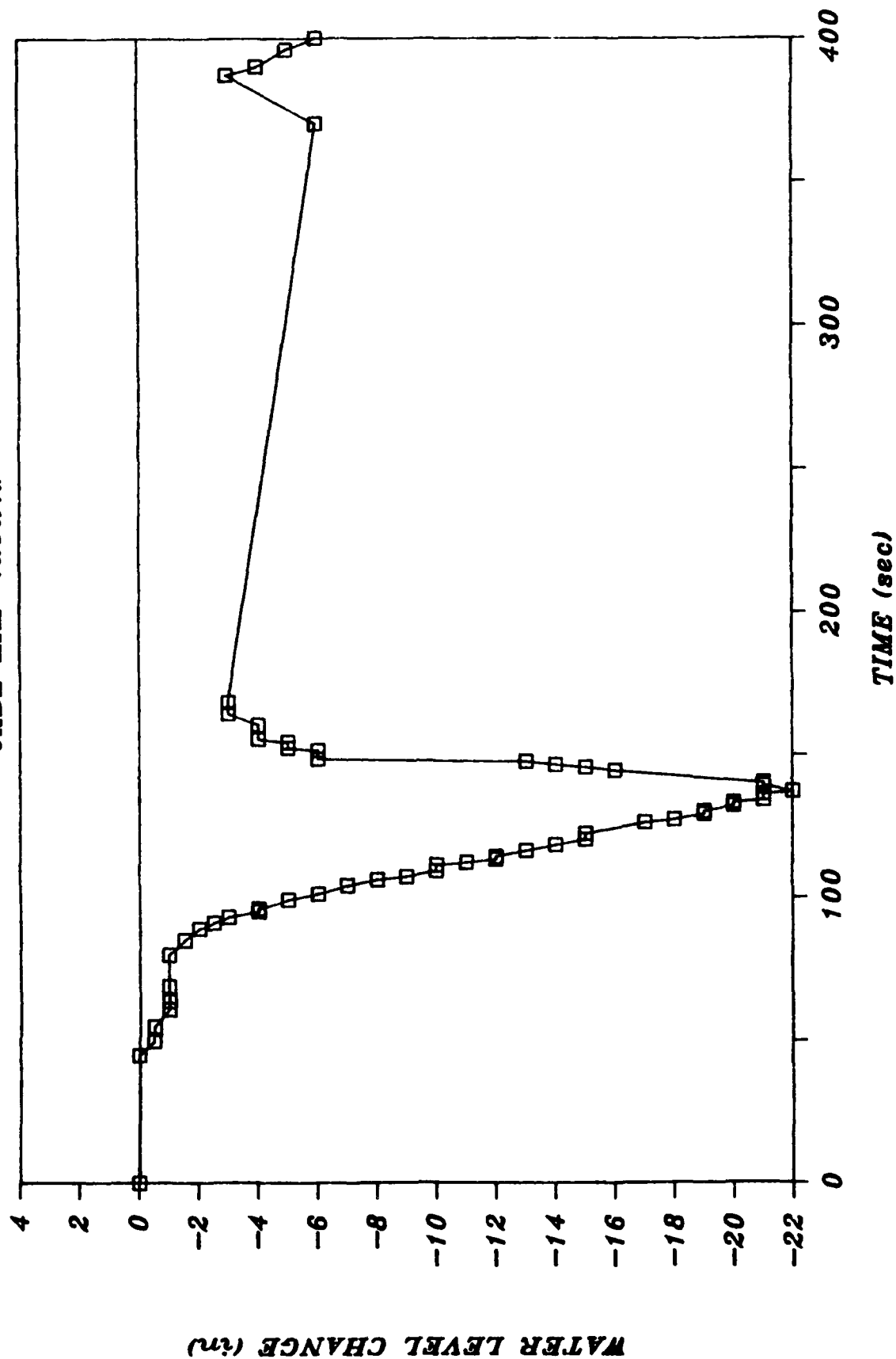
NAME OF SECTION SAND ISLAND

#####

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	111.0	16.0	-10.0
22	112.0	15.0	-11.0
23	113.0	14.0	-12.0
24	114.0	14.0	-12.0
25	116.0	13.0	-13.0
26	118.0	12.0	-14.0
27	120.0	11.0	-15.0
28	122.0	11.0	-15.0
29	126.0	9.0	-17.0
30	127.0	8.0	-18.0
31	129.0	7.0	-19.0
32	130.0	7.0	-19.0
33	132.0	6.0	-20.0
34	133.0	6.0	-20.0
35	134.0	5.0	-21.0
36	136.0	5.0	-21.0
37	137.0	4.0	-22.0
38	139.0	5.0	-21.0
39	140.0	5.0	-21.0
40	144.0	10.0	-16.0
41	145.0	11.0	-15.0
42	146.0	12.0	-14.0
43	147.0	13.0	-13.0
44	148.0	20.0	-6.0
45	151.0	20.0	-6.0
46	152.0	21.0	-5.0
47	154.0	21.0	-5.0
48	155.0	22.0	-4.0
49	160.0	22.0	-4.0
50	164.0	23.0	-3.0
51	168.0	23.0	-3.0
52	370.0	20.0	-6.0
53	387.0	23.0	-3.0
54	390.0	22.0	-4.0
55	396.0	21.0	-5.0
56	402.0	20.0	-6.0
57	410.0	21.0	-5.0
58	413.0	22.0	-4.0
59	415.0	23.0	-3.0
60	420.0	25.0	-1.0

SAND ISLAND 11/14/84

JADE KIM (down)



DRAWDOWN DATA

NAME OF SECTION SAND ISLAND

VESSEL NAME ALGOSOO

VESSEL LENGTH in feet = 730

VESSEL DRAFT in feet = 26.5

BOW ON TIME in sec = 90

STERN ON TIME in sec = 157

DISTANCE TO STAFF GAUGE from green side in feet = 55

BACKGROUND READING in inches = 14

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	14.0	0.0
2	3.0	14.0	0.0
3	40.0	14.0	0.0
4	51.0	13.0	-1.0
5	82.0	12.0	-2.0
6	95.0	12.0	-2.0
7	97.0	11.0	-3.0
8	107.0	11.0	-3.0
9	116.0	10.0	-4.0
10	126.0	10.0	-4.0
11	129.0	9.0	-5.0
12	139.0	9.0	-5.0
13	144.0	8.0	-6.0
14	145.0	8.0	-6.0
15	150.0	8.5	-5.5
16	160.0	8.0	-6.0
17	178.0	8.0	-6.0
18	186.0	8.5	-5.5
19	194.0	9.0	-5.0
20	207.0	9.0	-5.0

#####

DRAWDOWN DATA (continued)

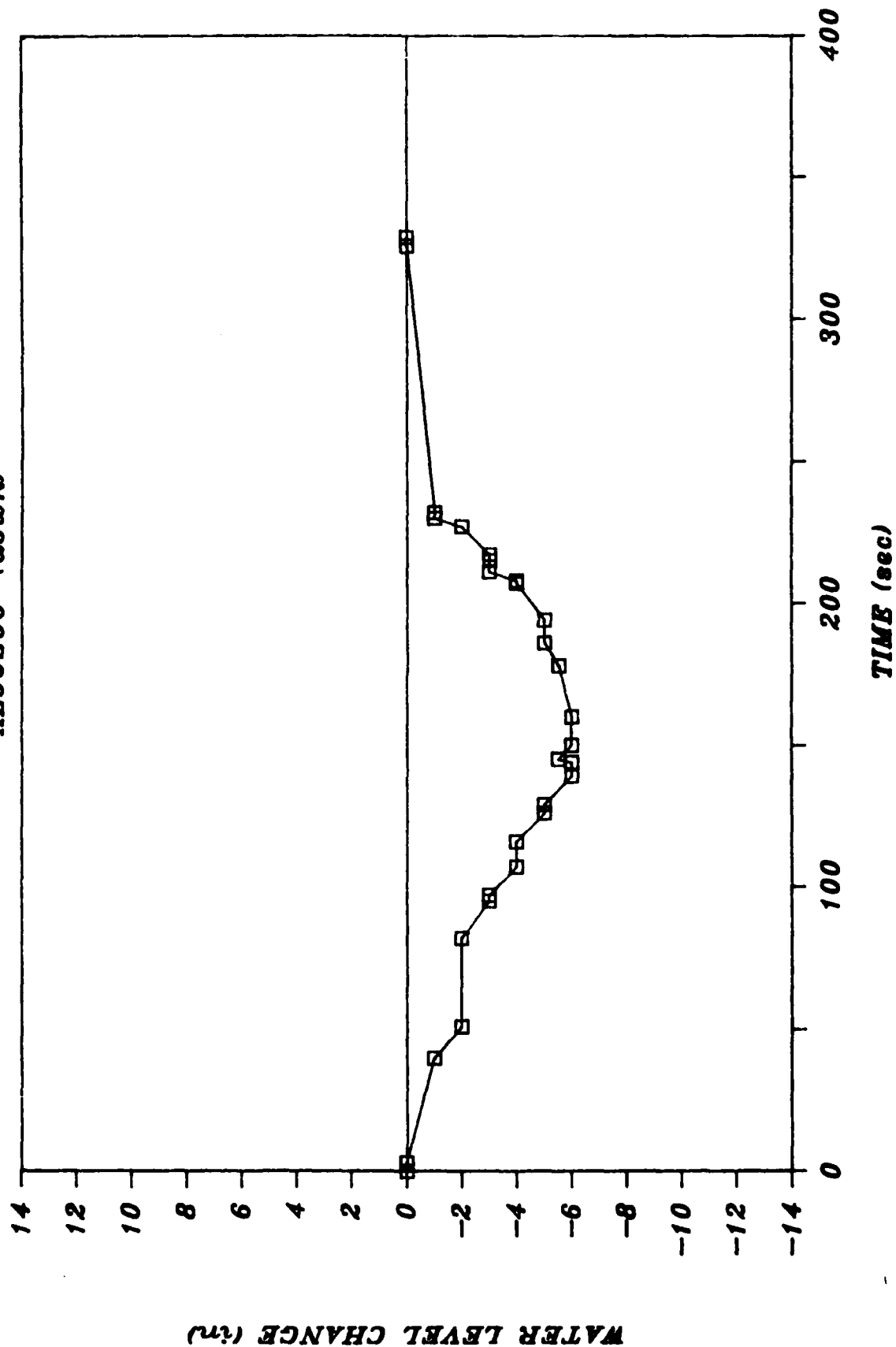
NAME OF SECTION SAND ISLAND

#####

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	208.0	10.0	-4.0
22	211.0	10.0	-4.0
23	215.0	11.0	-3.0
24	217.0	11.0	-3.0
25	227.0	11.0	-3.0
26	230.0	12.0	-2.0
27	232.0	13.0	-1.0
28	326.0	13.0	-1.0
29	329.0	14.0	0.0
30	330.0	14.0	0.0

SAND ISLAND 11/14/84

ALGOS00 (down)



#####

DRAWDOWN DATA

NAME OF SECTION SAND ISLAND

#####

DATE OF OBSERVATION 11/14/84

VESSEL NAME ALGOSOO

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 26.5

VESSEL SPEED in feet/sec. = 10.9

BOW ON TIME in sec = 90

STERN ON TIME in sec = 157

DISTANCE TO STAFF GAUGE from green side in feet = 2515

BACKGROUND READING in inches = 21

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	21.0	0.0
2	15.0	21.0	0.0
3	27.0	20.4	-0.6
4	72.0	20.4	-0.6
5	78.0	19.2	-1.8
6	83.0	19.2	-1.8
7	93.0	18.0	-3.0
8	96.0	18.0	-3.0
9	100.0	16.8	-4.2
10	105.0	15.6	-5.4
11	110.0	15.0	-6.0
12	114.0	14.4	-6.6
13	117.0	14.4	-6.6
14	121.0	13.2	-7.8
15	128.0	13.2	-7.8
16	131.0	12.0	-9.0
17	146.0	12.0	-9.0
18	148.0	10.8	-10.2
19	151.0	12.0	-9.0
20	153.0	13.2	-7.8

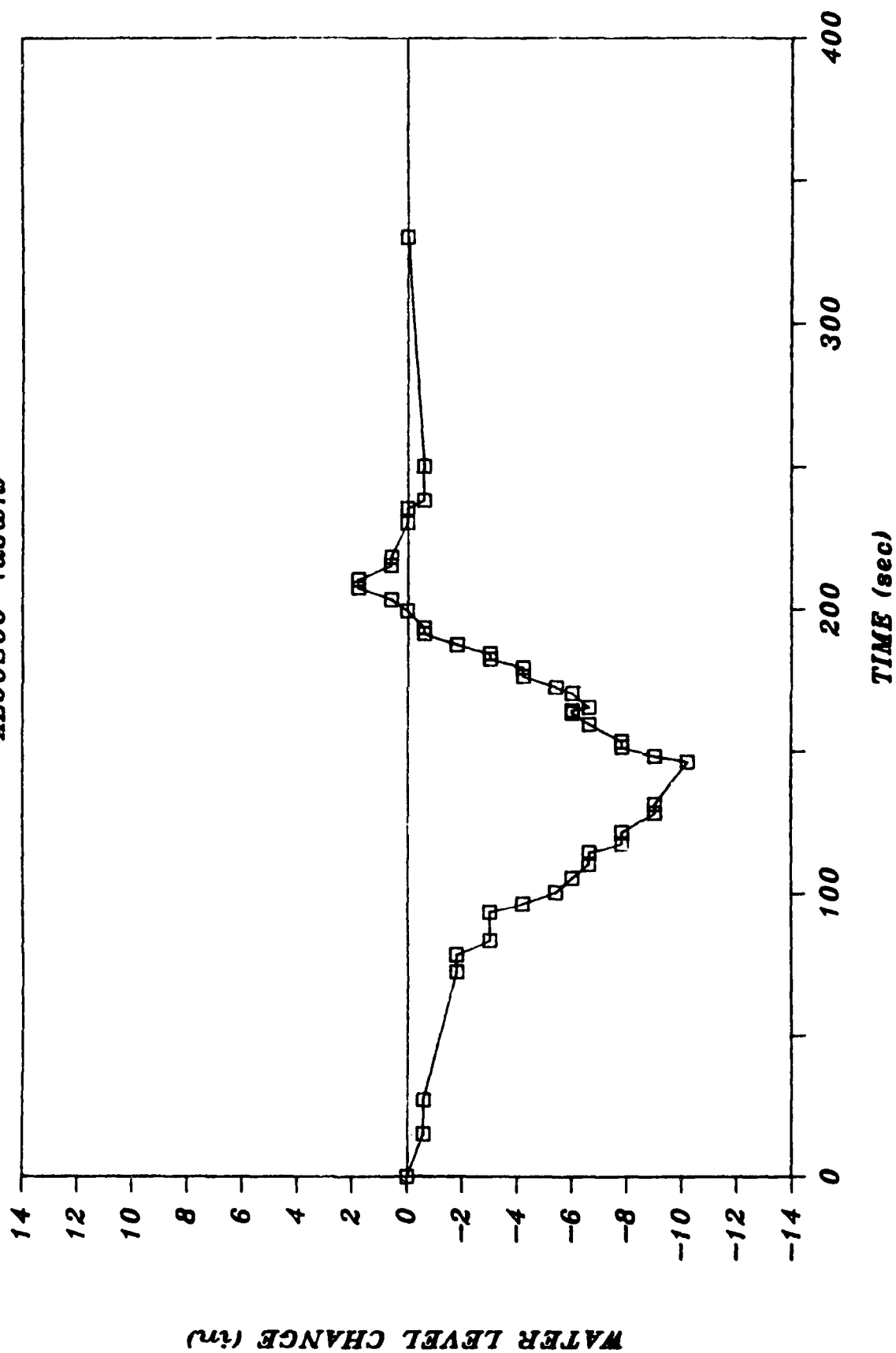
DRAWDOWN DATA (continued)

NAME OF SECTION SAND ISLAND

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	159.0	13.2	-7.8
22	163.0	14.4	-6.6
23	164.0	15.0	-6.0
24	165.0	15.0	-6.0
25	170.0	14.4	-6.6
26	172.0	15.0	-6.0
27	176.0	15.6	-5.4
28	179.0	16.8	-4.2
29	182.0	16.8	-4.2
30	184.0	18.0	-3.0
31	187.0	18.0	-3.0
32	191.0	19.2	-1.8
33	193.0	20.4	-0.6
34	199.0	20.4	-0.6
35	203.0	21.0	0.0
36	207.0	21.6	0.6
37	210.0	22.8	1.8
38	215.0	22.8	1.8
39	218.0	21.6	0.6
40	230.0	21.6	0.6
41	235.0	21.0	0.0
42	238.0	21.0	0.0
43	250.0	20.4	-0.6
44	330.0	20.4	-0.6

SAND ISLAND 11/14/84

ALGOS00 (down)



DRAWDOWN DATA

NAME OF SECTION SAND ISLAND

VESSEL NAME ALGOSOO

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 26.5

VESSEL SPEED in feet/sec. = 10.9

BOW ON TIME in sec = 90

STERN ON TIME in sec = 157

DISTANCE TO STAFF GAUGE from green side in feet = 2800

BACKGROUND READING in inches = 26

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	26.0	0.0
2	21.0	26.0	0.0
3	48.0	25.5	-0.5
4	73.0	25.5	-0.5
5	78.0	25.0	-1.0
6	82.0	24.5	-1.5
7	94.0	24.0	-2.0
8	98.0	23.5	-2.5
9	100.0	23.0	-3.0
10	102.0	22.0	-4.0
11	106.0	21.5	-4.5
12	113.0	21.0	-5.0
13	115.0	21.0	-5.0
14	118.0	20.5	-5.5
15	120.0	20.0	-6.0
16	122.0	19.5	-6.5
17	125.0	19.0	-7.0
18	128.0	19.0	-7.0
19	130.0	18.0	-8.0
20	135.0	18.0	-8.0

DRAWDOWN DATA (continued)

NAME OF SECTION	SAND ISLAND
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

21	137.0	17.5	-8.5
22	140.0	17.0	-9.0
23	145.0	17.0	-9.0
24	146.0	16.0	-10.0
25	148.0	15.0	-11.0
26	150.0	15.5	-10.5
27	152.0	15.5	-10.5
28	161.0	16.0	-10.0
29	164.0	17.0	-9.0
30	168.0	18.0	-8.0
31	169.0	19.0	-7.0
32	172.0	19.5	-6.5
33	174.0	20.0	-6.0
34	175.0	21.0	-5.0
35	176.0	22.0	-4.0
36	179.0	23.0	-3.0
37	180.0	23.5	-2.5
38	183.0	24.0	-2.0
39	186.0	25.0	-1.0
40	187.0	26.0	0.0
41	191.0	26.5	0.5
42	193.0	27.0	1.0
43	195.0	28.0	2.0
44	197.0	28.0	2.0
45	198.0	28.0	2.0
46	200.0	29.0	3.0
47	202.0	29.0	3.0
48	205.0	30.0	4.0
49	210.0	30.0	4.0
50	214.0	29.0	3.0
51	217.0	28.5	2.5
52	219.0	28.0	2.0
53	221.0	27.5	1.5
54	223.0	27.0	1.0
55	224.0	26.5	0.5
56	226.0	26.0	0.0
57	229.0	25.0	-1.0
58	232.0	24.5	-1.5
59	237.0	25.5	-0.5
60	246.0	26.0	0.0
61	254.0	26.0	0.0
62	258.0	26.5	0.5
63	265.0	26.5	0.5
64	268.0	26.0	0.0

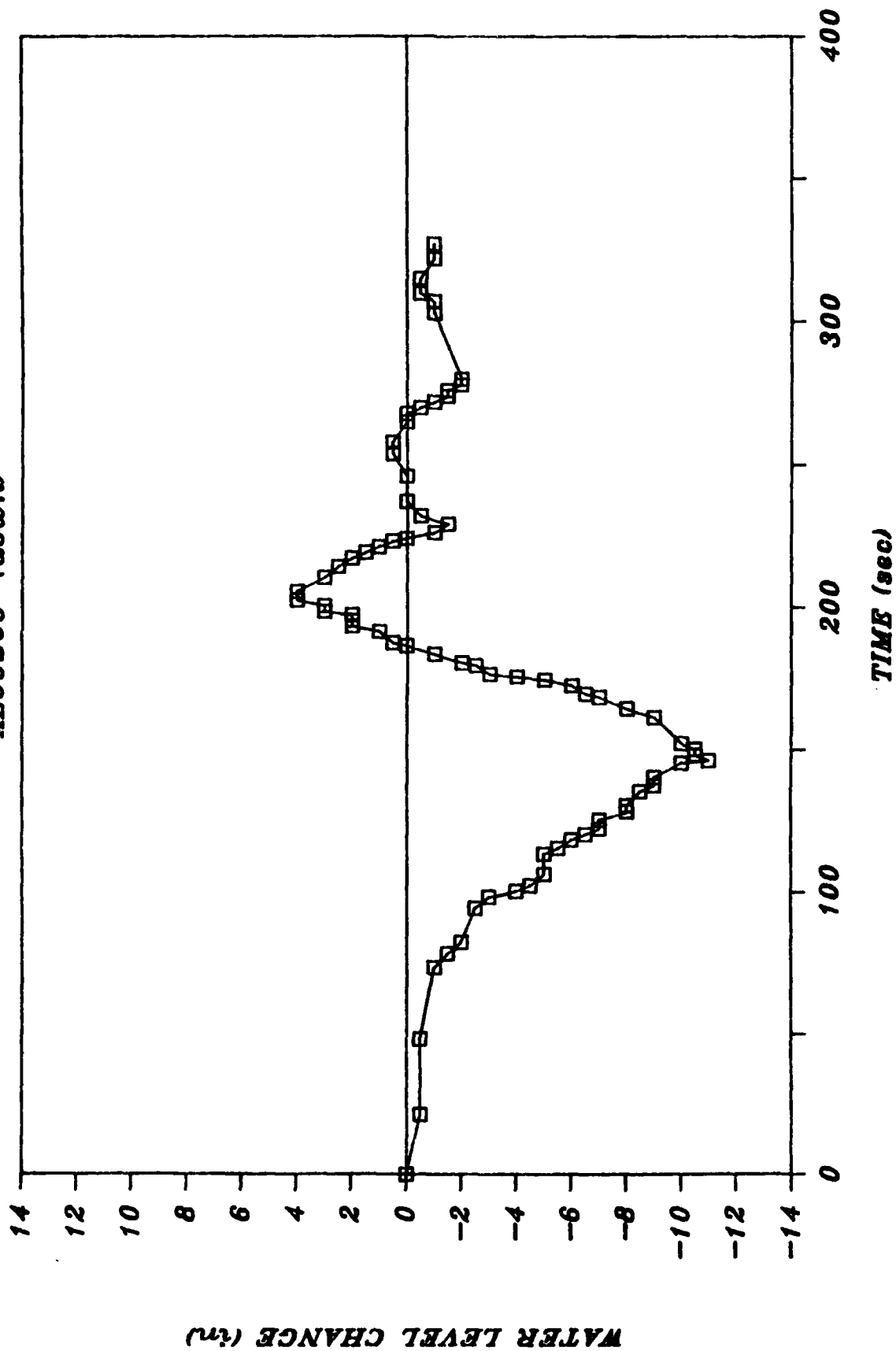
DRAWDOWN DATA (continued)

NAME OF SECTION SAND ISLAND

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
65	270.0	26.0	0.0
66	272.0	25.5	-0.5
67	274.0	25.0	-1.0
68	276.0	24.5	-1.5
69	278.0	24.5	-1.5
70	280.0	24.0	-2.0
71	303.0	24.0	-2.0
72	307.0	25.0	-1.0
73	310.0	25.0	-1.0
74	315.0	25.5	-0.5
75	322.0	25.5	-0.5
76	327.0	25.0	-1.0
77	330.0	25.0	-1.0

SAND ISLAND 11/14/84

ALGOS00 (down)



DRAWDOWN DATA

NAME OF SECTION SAND ISLAND

DATE OF OBSERVATION 11/14/84

VESSEL NAME HERBERT C. JACKSON

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 690

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 26.5

VESSEL SPEED in feet/sec. = 7.8

BOW ON TIME in sec = 69

STERN ON TIME in sec = 158

DISTANCE TO STAFF GAUGE from green side in feet = 2800

BACKGROUND READING in inches = 23

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	23.0	0.0
2	4.0	24.5	1.5
3	14.0	24.0	1.0
4	17.0	24.5	1.5
5	20.0	24.0	1.0
6	49.0	24.0	1.0
7	52.0	23.3	0.3
8	54.0	23.3	0.3
9	72.0	22.0	-1.0
10	77.0	22.5	-0.5
11	79.0	22.5	-0.5
12	81.0	22.0	-1.0
13	83.0	21.0	-2.0
14	86.0	20.0	-3.0
15	89.0	19.0	-4.0
16	92.0	18.0	-5.0
17	94.0	16.0	-7.0
18	98.0	13.0	-10.0
19	101.0	13.0	-10.0
20	103.0	12.0	-11.0

DRAWDOWN DATA (continued)

NAME OF SECTION SAND ISLAND

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	108.0	12.0	-11.0
22	110.0	11.0	-12.0
23	112.0	10.5	-12.5
24	114.0	11.0	-12.0
25	115.0	11.0	-12.0
26	116.0	12.0	-11.0
27	117.0	11.0	-12.0
28	120.0	12.0	-11.0
29	122.0	11.0	-12.0
30	123.0	12.0	-11.0
31	124.0	13.0	-10.0
32	125.0	13.0	-10.0
33	127.0	14.0	-9.0
34	129.0	15.0	-8.0
35	131.0	16.0	-7.0
36	141.0	16.0	-7.0
37	143.0	17.0	-6.0
38	162.0	17.0	-6.0
39	163.0	18.0	-5.0
40	164.0	19.0	-4.0
41	165.0	20.0	-3.0
42	167.0	21.0	-2.0
43	168.0	22.0	-1.0
44	169.0	23.0	0.0
45	170.0	25.0	2.0
46	171.0	26.0	3.0
47	174.0	28.0	5.0
48	176.0	29.0	6.0
49	178.0	30.0	7.0
50	179.0	30.0	7.0
51	180.0	31.0	8.0
52	183.0	31.0	8.0
53	184.0	30.0	7.0
54	186.0	29.0	6.0
55	187.0	28.0	5.0
56	189.0	24.0	1.0
57	190.0	24.0	1.0
58	193.0	22.0	-1.0
59	195.0	21.0	-2.0
60	197.0	20.0	-3.0
61	198.0	20.5	-2.5
62	200.0	18.0	-5.0
63	201.0	18.0	-5.0
64	203.0	16.0	-7.0

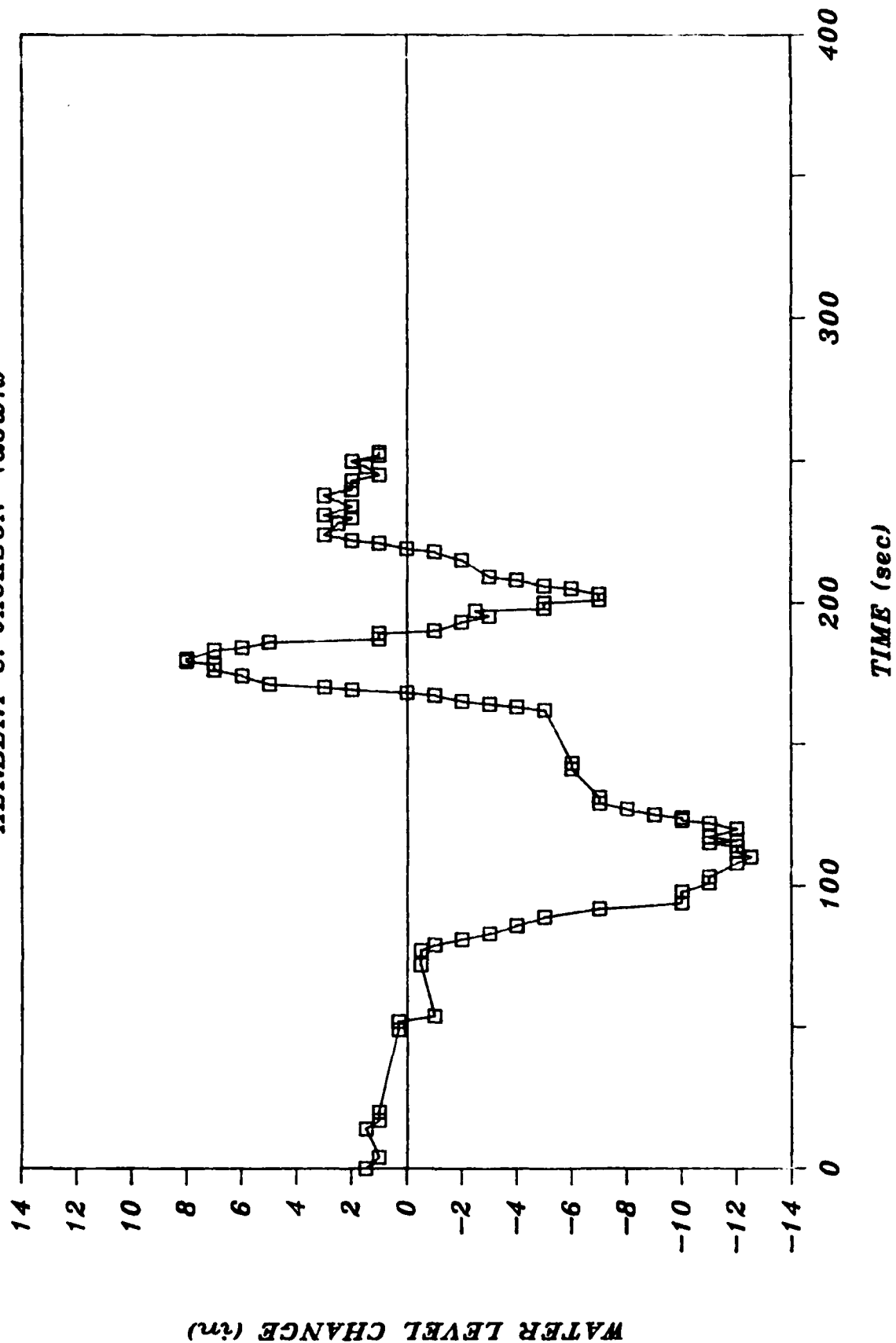
DRAWDOWN DATA (continued)

NAME OF SECTION SAND ISLAND

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
65	205.0	16.0	-7.0
66	206.0	17.0	-6.0
67	208.0	18.0	-5.0
68	209.0	19.0	-4.0
69	215.0	20.0	-3.0
70	218.0	21.0	-2.0
71	219.0	22.0	-1.0
72	221.0	23.0	0.0
73	222.0	24.0	1.0
74	224.0	25.0	2.0
75	228.0	26.0	3.0
76	230.0	25.5	2.5
77	231.0	25.0	2.0
78	234.0	26.0	3.0
79	238.0	25.0	2.0
80	240.0	26.0	3.0
81	243.0	25.0	2.0
82	245.0	25.0	2.0
83	248.0	24.0	1.0
84	250.0	24.5	1.5
85	252.0	25.0	2.0
86	253.0	24.0	1.0
87	267.0	24.0	1.0

SAND ISLAND 11/14/84

HERBERT C. JACKSON (down)



 DRAWDOWN DATA

NAME OF SECTION SAND ISLAND
 #####

DATE OF OBSERVATION 5/20/85

VESSEL NAME WILLIAM CLAY FORD

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 767

VESSEL BEAM in feet = 70

VESSEL DRAFT in feet = 27.5

VESSEL SPEED in feet/sec. = 10.96

BOW ON TIME in sec = 84

STERN ON TIME in sec = 154

DISTANCE TO STAFF GAUGE from green side in feet = 62

BACKGROUND READING in inches = 22

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	22.0	0.0
2	25.0	22.0	0.0
3	34.0	21.0	-1.0
4	46.0	21.0	-1.0
5	56.0	20.0	-2.0
6	67.0	20.0	-2.0
7	83.0	19.0	-3.0
8	96.0	18.0	-4.0
9	109.0	18.0	-4.0
10	114.0	17.0	-5.0
11	121.0	16.0	-6.0
12	135.0	15.0	-7.0
13	140.0	15.0	-7.0
14	149.0	14.0	-8.0
15	157.0	14.0	-8.0
16	172.0	15.0	-7.0
17	188.0	16.0	-6.0
18	196.0	17.0	-5.0
19	206.0	18.0	-4.0
20	213.0	19.0	-3.0

#####

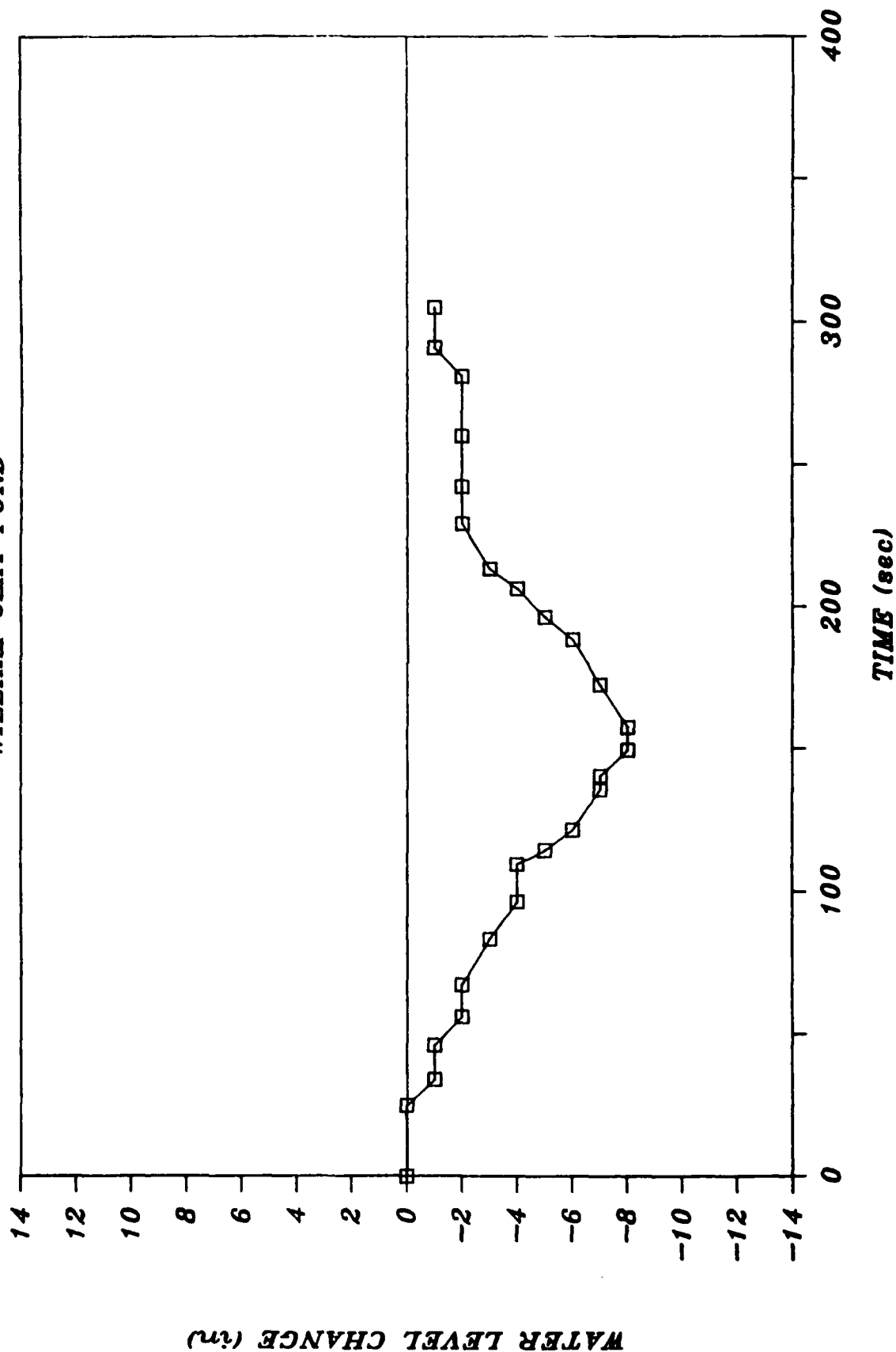
DRAWDOWN DATA (continued)

NAME OF SECTION SAND ISLAND

#####

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	229.0	20.0	-2.0
22	242.0	20.0	-2.0
23	260.0	20.0	-2.0
24	281.0	20.0	-2.0
25	291.0	21.0	-1.0
26	305.0	21.0	-1.0

SAND ISLAND (green)
WILLIAM CLAY FORD



@@
 DRAWDOWN DATA

NAME OF SECTION SAND ISLAND
 @@

DATE OF OBSERVATION 5/20/85
 VESSEL NAME WILLIAM CLAY FORD
 DIRECTION DOWNBOUND
 VESSEL LENGTH in feet = 767
 VESSEL BEAM in feet = 70
 VESSEL DRAFT in feet = 27.5
 VESSEL SPEED in feet/sec. = 10.96
 BOW ON TIME in sec = 84
 STERN ON TIME in sec = 154
 DISTANCE TO STAFF GAUGE from green side in feet = 2790
 BACKGROUND READING in inches = 23

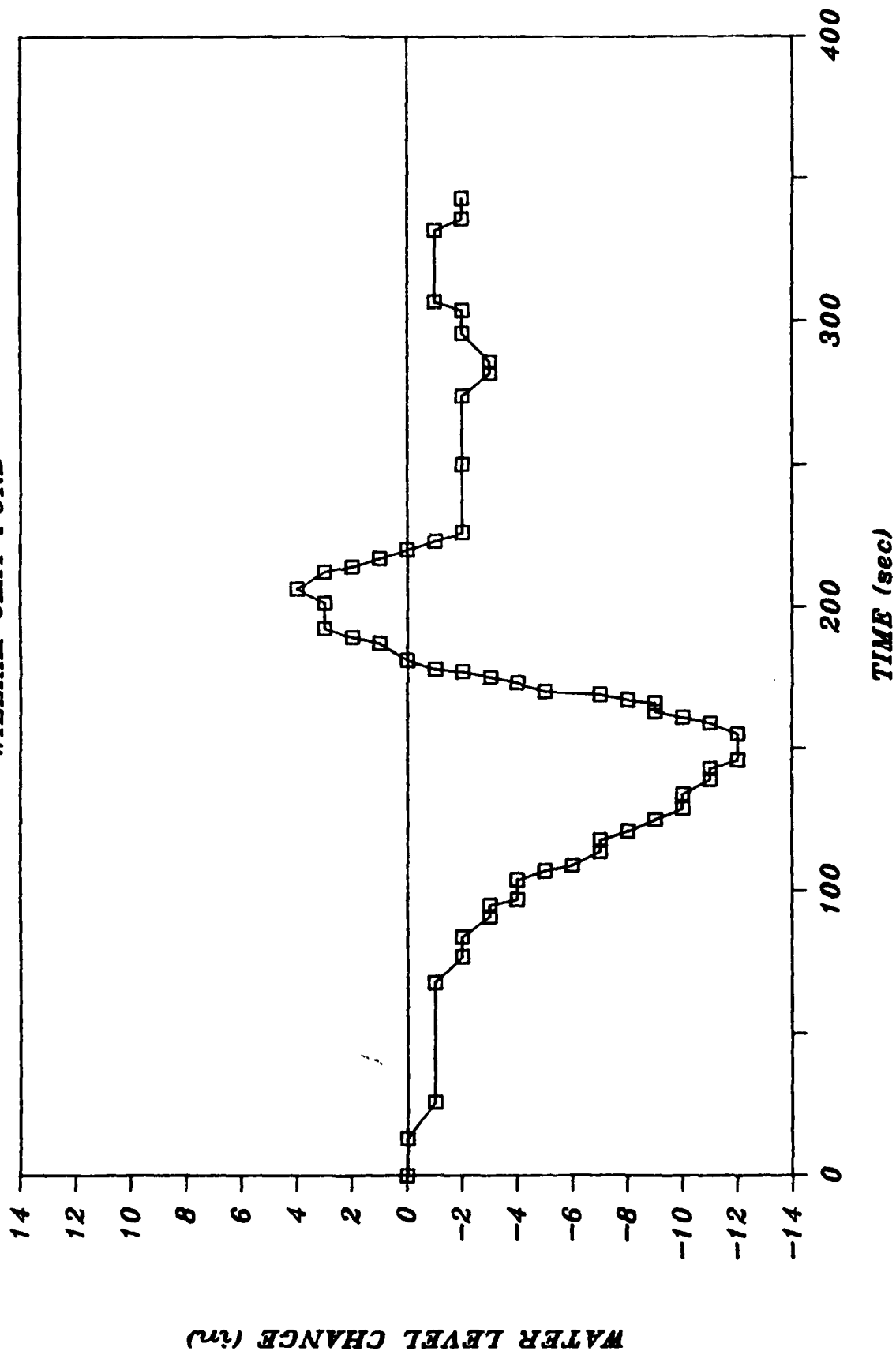
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	23.0	0.0
2	13.0	23.0	0.0
3	26.0	22.0	-1.0
4	68.0	22.0	-1.0
5	77.0	21.0	-2.0
6	84.0	21.0	-2.0
7	91.0	20.0	-3.0
8	95.0	20.0	-3.0
9	97.0	19.0	-4.0
10	104.0	19.0	-4.0
11	107.0	18.0	-5.0
12	109.0	17.0	-6.0
13	114.0	16.0	-7.0
14	118.0	16.0	-7.0
15	121.0	15.0	-8.0
16	125.0	14.0	-9.0
17	129.0	13.0	-10.0
18	134.0	13.0	-10.0
19	139.0	12.0	-11.0
20	143.0	12.0	-11.0

NAME OF SECTION SAND ISLAND
 OOO

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	146.0	11.0	-12.0
22	155.0	11.0	-12.0
23	159.0	12.0	-11.0
24	161.0	13.0	-10.0
25	163.0	14.0	-9.0
26	166.0	14.0	-9.0
27	167.0	15.0	-8.0
28	169.0	16.0	-7.0
29	170.0	18.0	-5.0
30	173.0	19.0	-4.0
31	175.0	20.0	-3.0
32	177.0	21.0	-2.0
33	178.0	22.0	-1.0
34	181.0	23.0	0.0
35	187.0	24.0	1.0
36	189.0	25.0	2.0
37	192.0	26.0	3.0
38	201.0	26.0	3.0
39	206.0	27.0	4.0
40	212.0	26.0	3.0
41	214.0	25.0	2.0
42	217.0	24.0	1.0
43	220.0	23.0	0.0
44	223.0	22.0	-1.0
45	226.0	21.0	-2.0
46	250.0	21.0	-2.0
47	274.0	21.0	-2.0
48	282.0	20.0	-3.0
49	286.0	20.0	-3.0
50	296.0	21.0	-2.0
51	304.0	21.0	-2.0
52	307.0	22.0	-1.0
53	332.0	22.0	-1.0
54	336.0	21.0	-2.0
55	343.0	21.0	-2.0

SAND ISLAND (red)

WILLIAM CLAY FORD



#####

DRAWDOWN DATA

NAME OF SECTION SAND ISLAND

#####

DATE OF OBSERVATION 5/20/85

VESSEL NAME SELKIRK SETTLER

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 79.75

VESSEL DRAFT in feet = 25.5

VESSEL SPEED in feet/sec. = 13.04

BOW ON TIME in sec = 97

STERN ON TIME in sec = 153

DISTANCE TO STAFF GAUGE from green side in feet = 62

BACKGROUND READING in inches = 22

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	22.0	0.0
2	35.0	22.0	0.0
3	60.0	23.0	1.0
4	76.0	22.0	0.0
5	92.0	21.0	-1.0
6	99.0	20.0	-2.0
7	107.0	19.0	-3.0
8	120.0	18.0	-4.0
9	130.0	17.0	-5.0
10	136.0	16.0	-6.0
11	145.0	15.0	-7.0
12	153.0	14.0	-8.0
13	160.0	13.0	-9.0
14	167.0	12.0	-10.0
15	180.0	13.0	-9.0
16	189.0	14.0	-8.0
17	191.0	15.0	-7.0
18	210.0	16.0	-6.0
19	224.0	17.0	-5.0
20	234.0	18.0	-4.0

oo

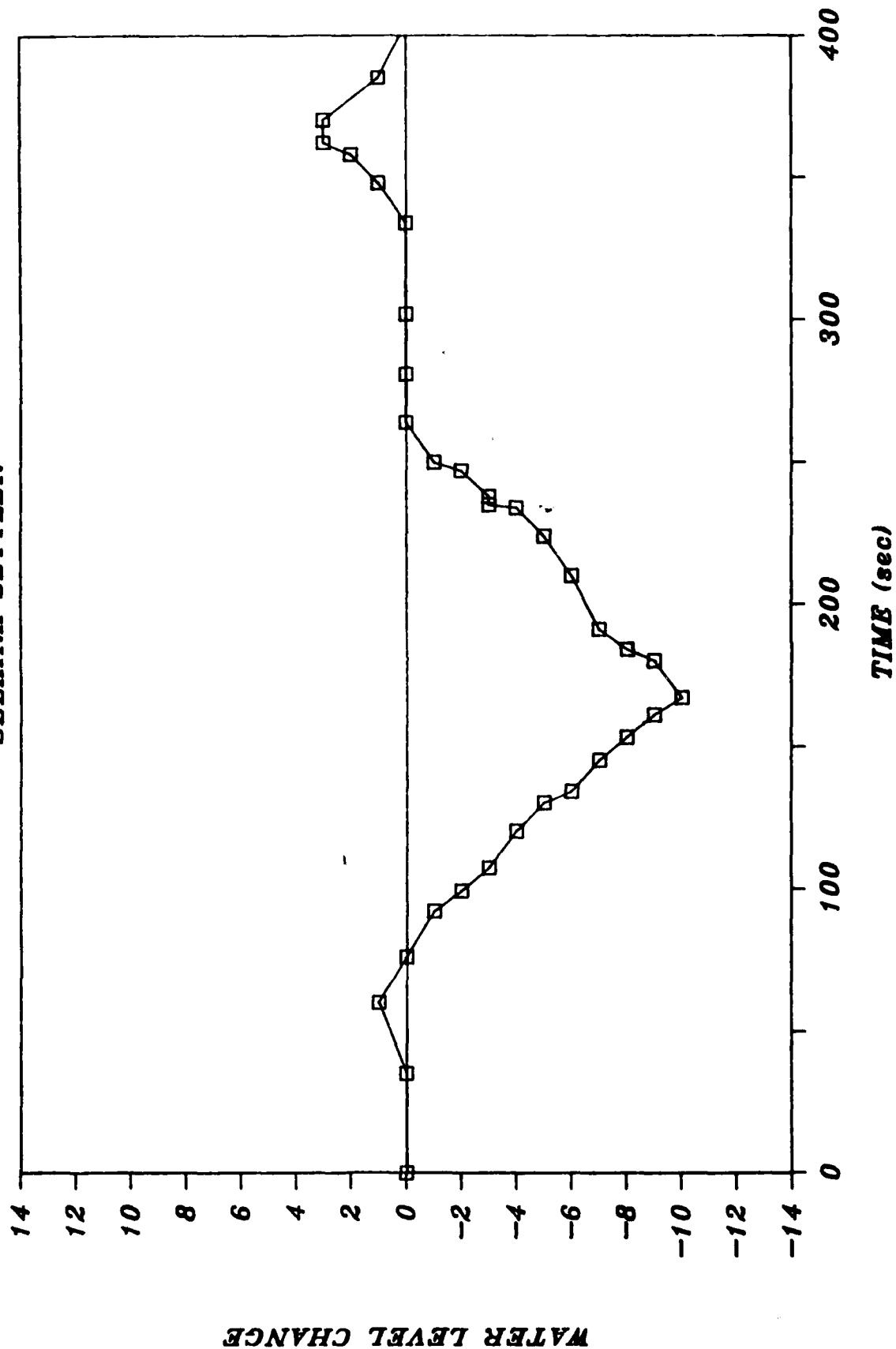
DRAWDOWN DATA (continued)

NAME OF SECTION SAND ISLAND

oo

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	235.0	19.0	-3.0
22	238.0	19.0	-3.0
23	247.0	20.0	-2.0
24	250.0	21.0	-1.0
25	264.0	22.0	0.0
26	281.0	22.0	0.0
27	302.0	22.0	0.0
28	362.0	25.0	3.0
29	370.0	25.0	3.0
30	385.0	23.0	1.0
31	404.0	22.0	0.0

SAND ISLAND (green)
SELKIRK SETTLER



oo

DRAWDOWN DATA

NAME OF SECTION SAND ISLAND

oo

DATE OF OBSERVATION 5/20/85

VESSEL NAME SELKIRK SETTLER

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75.75

VESSEL DRAFT in feet = 25.5

VESSEL SPEED in feet/sec. = 13.04

BOW ON TIME in sec = 97

STERN ON TIME in sec = 153

DISTANCE TO STAFF GAUGE from green side in feet = 2790

BACKGROUND READING in inches = 23

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	23.0	0.0
2	17.0	23.0	0.0
3	30.0	23.0	0.0
4	37.0	23.0	0.0
5	47.0	23.0	0.0
6	62.0	23.0	0.0
7	86.0	23.0	0.0
8	95.0	22.0	-1.0
9	97.0	21.0	-2.0
10	102.0	21.0	-2.0
11	107.0	20.0	-3.0
12	111.0	20.0	-3.0
13	119.0	19.0	-4.0
14	121.0	18.0	-5.0
15	123.0	17.0	-6.0
16	125.0	16.0	-7.0
17	128.0	15.0	-8.0
18	131.0	14.0	-9.0
19	133.0	13.0	-10.0
20	139.0	13.0	-10.0

DRAWDOWN DATA (continued)

NAME OF SECTION SAND ISLAND

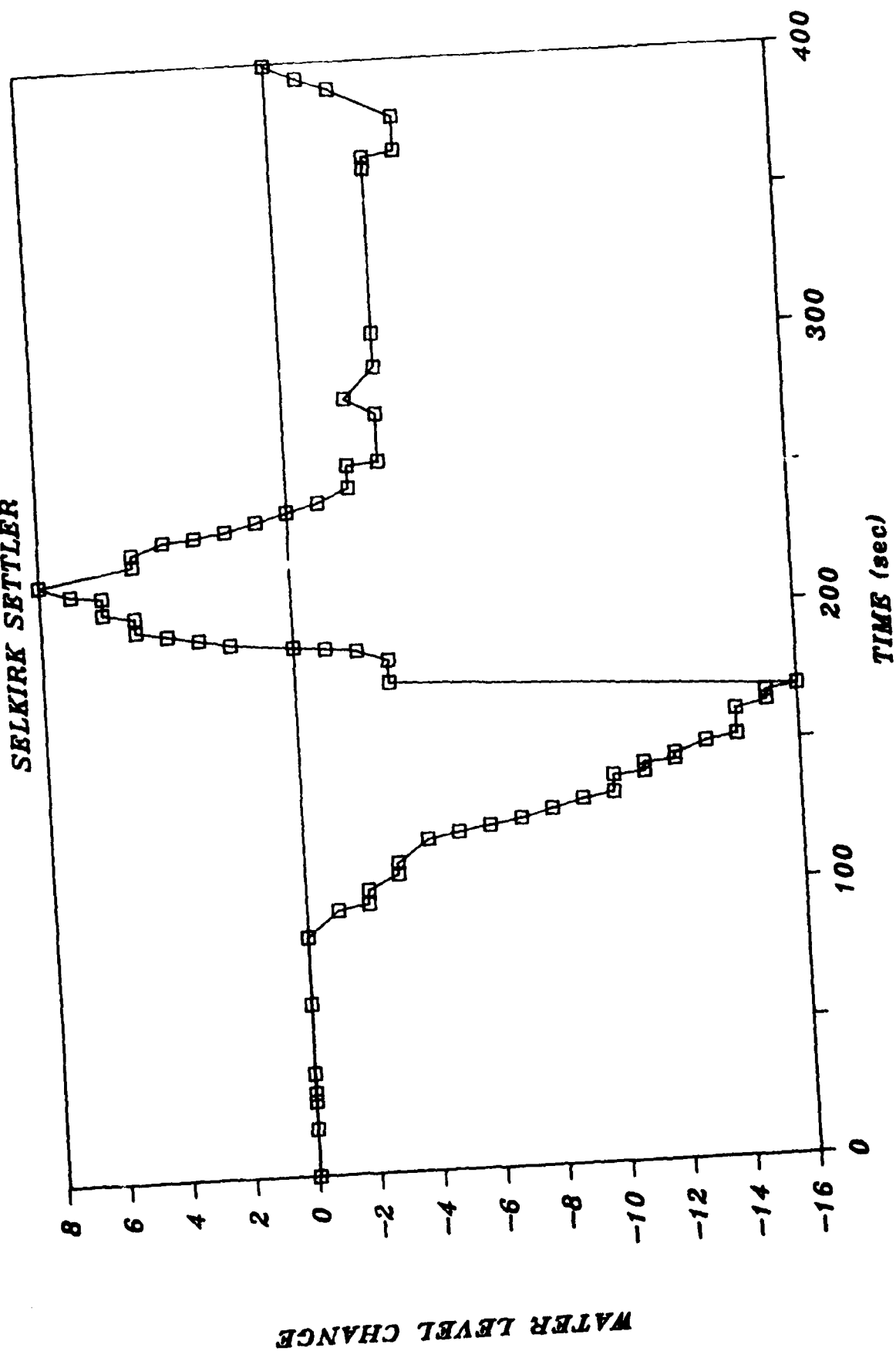
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	140.0	12.0	-11.0
22	143.0	12.0	-11.0
23	144.0	11.0	-12.0
24	146.0	11.0	-12.0
25	150.0	10.0	-13.0
26	152.0	9.0	-14.0
27	161.0	9.0	-14.0
28	164.0	8.0	-15.0
29	167.0	8.0	-15.0
30	169.0	7.0	-16.0
31	176.0	20.0	-3.0
32	184.0	20.0	-3.0
33	188.0	21.0	-2.0
34	189.0	22.0	-1.0
35	190.0	23.0	0.0
36	192.0	25.0	2.0
37	194.0	26.0	3.0
38	196.0	27.0	4.0
39	198.0	28.0	5.0
40	203.0	28.0	5.0
41	205.0	29.0	6.0
42	211.0	29.0	6.0
43	212.0	30.0	7.0
44	216.0	30.0	7.0
45	222.0	28.0	5.0
46	226.0	28.0	5.0
47	230.0	27.0	4.0
48	231.0	26.0	3.0
49	233.0	25.0	2.0
50	236.0	24.0	1.0
51	239.0	23.0	0.0
52	242.0	22.0	-1.0
53	247.0	21.0	-2.0
54	255.0	21.0	-2.0
55	256.0	20.0	-3.0
56	273.0	20.0	-3.0
57	279.0	21.0	-2.0
58	290.0	20.0	-3.0
59	302.0	20.0	-3.0
60	361.0	20.0	-3.0
61	365.0	20.0	-3.0
62	367.0	19.0	-4.0
63	379.0	19.0	-4.0
64	390.0	21.0	-2.0

DRAWDOWN DATA (continued)

NAME OF SECTION SAND ISLAND
#####

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
65	394.0	22.0	-1.0
66	399.0	23.0	0.0
67	404.0	23.0	0.0
68	415.0	22.0	-1.0
69	425.0	20.0	-3.0

SAND ISLAND (red)
SELKIRK SETTLER



NAME OF SECTION	SAND ISLAND
<div style="border: 1px solid black; height: 100px; width: 100%;"></div>	

DATE OF OBSERVATION 5/20/85
VESSEL NAME COLUMBIA STAR
DIRECTION DOWNBOUND
VESSEL LENGTH in feet = 1000
VESSEL BEAM in feet = 105
VESSEL DRAFT in feet = 27.5
VESSEL SPEED in feet/sec. = 10.53
BOW ON TIME in sec = 140
STERN ON TIME in sec = 235
DISTANCE TO STAFF GAUGE from green side in feet = 62
BACKGROUND READING in inches = 24

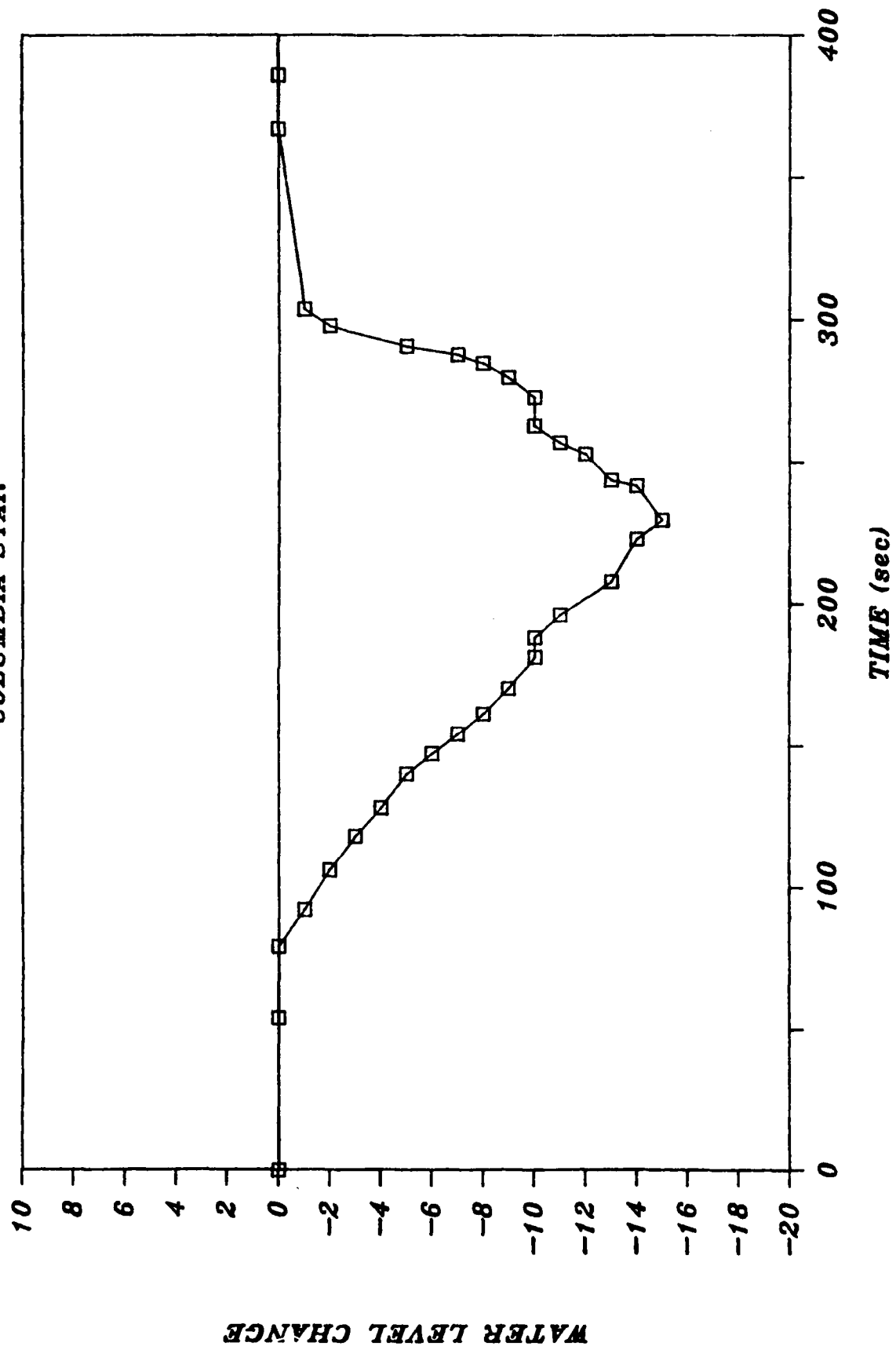
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	24.0	0.0
2	54.0	24.0	0.0
3	79.0	24.0	0.0
4	92.0	23.0	-1.0
5	106.0	22.0	-2.0
6	118.0	21.0	-3.0
7	128.0	20.0	-4.0
8	140.0	19.0	-5.0
9	147.0	18.0	-6.0
10	154.0	17.0	-7.0
11	161.0	16.0	-8.0
12	170.0	15.0	-9.0
13	181.0	14.0	-10.0
14	188.0	13.0	-11.0
15	196.0	12.0	-12.0
16	208.0	11.0	-13.0
17	223.0	10.0	-14.0
18	230.0	9.0	-15.0
19	242.0	10.0	-14.0
20	244.0	11.0	-13.0

DRAWDOWN DATA (continued)

NAME OF SECTION	SAND ISLAND
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	253.0	12.0	-12.0
22	257.0	13.0	-11.0
23	263.0	14.0	-10.0
24	273.0	14.0	-10.0
25	280.0	15.0	-9.0
26	285.0	16.0	-8.0
27	288.0	17.0	-7.0
28	291.0	19.0	-5.0
29	298.0	22.0	-2.0
30	304.0	23.0	-1.0
31	367.0	24.0	0.0
32	386.0	24.0	0.0
33	409.0	24.0	0.0
34	419.0	25.0	1.0
35	428.0	25.0	1.0
36	435.0	24.0	0.0

SAND ISLAND (green)
COLUMBIA STAR



 DRAWDOWN DATA

NAME OF SECTION SAND ISLAND
 #####

DATE OF OBSERVATION 5/20/85

VESSEL NAME COLUMBIA STAR

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 1000

VESSEL BEAM in feet = 105

VESSEL DRAFT in feet = 27.5

VESSEL SPEED in feet/sec. = 10.53

BOW ON TIME in sec = 140

STERN ON TIME in sec = 235

DISTANCE TO STAFF GAUGE from green side in feet = 2790

BACKGROUND READING in inches = 23

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	23.0	0.0
2	5.0	23.0	0.0
3	11.0	23.0	0.0
4	12.0	24.0	1.0
5	15.0	24.0	1.0
6	19.0	25.0	2.0
7	24.0	25.0	2.0
8	30.0	25.0	2.0
9	46.0	25.0	2.0
10	52.0	25.0	2.0
11	68.0	25.0	2.0
12	90.0	24.0	1.0
13	102.0	24.0	1.0
14	108.0	23.0	0.0
15	115.0	23.0	0.0
16	122.0	23.0	0.0
17	126.0	22.0	-1.0
18	129.0	21.0	-2.0
19	138.0	20.0	-3.0
20	142.0	19.0	-4.0

oo

DRAWDOWN DATA (continued)

NAME OF SECTION SAND ISLAND

oo

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	149.0	18.0	-5.0
22	152.0	18.0	-5.0
23	153.0	17.0	-6.0
24	156.0	17.0	-6.0
25	161.0	16.0	-7.0
26	167.0	15.0	-8.0
27	170.0	14.0	-9.0
28	175.0	13.0	-10.0
29	181.0	12.0	-11.0
30	184.0	12.0	-11.0
31	187.0	12.0	-11.0
32	190.0	12.0	-11.0
33	196.0	12.0	-11.0
34	199.0	11.0	-12.0
35	205.0	10.0	-13.0
36	211.0	10.0	-13.0
37	215.0	9.0	-14.0
38	219.0	9.0	-14.0
39	224.0	9.0	-14.0
40	233.0	9.0	-14.0
41	237.0	9.0	-14.0
42	240.0	13.0	-10.0
43	243.0	17.0	-6.0
44	247.0	22.0	-1.0
45	254.0	26.0	3.0
46	259.0	28.0	5.0
47	261.0	29.0	6.0
48	265.0	29.0	6.0
49	267.0	30.0	7.0
50	270.0	30.0	7.0
51	274.0	30.0	7.0
52	277.0	29.0	6.0
53	280.0	27.0	4.0
54	285.0	25.0	2.0
55	289.0	25.0	2.0
56	296.0	23.0	0.0
57	305.0	22.0	-1.0
58	315.0	22.0	-1.0
59	324.0	22.0	-1.0
60	332.0	22.0	-1.0
61	340.0	22.0	-1.0
62	355.0	21.0	-2.0
63	361.0	20.0	-3.0
64	368.0	20.0	-3.0

oo

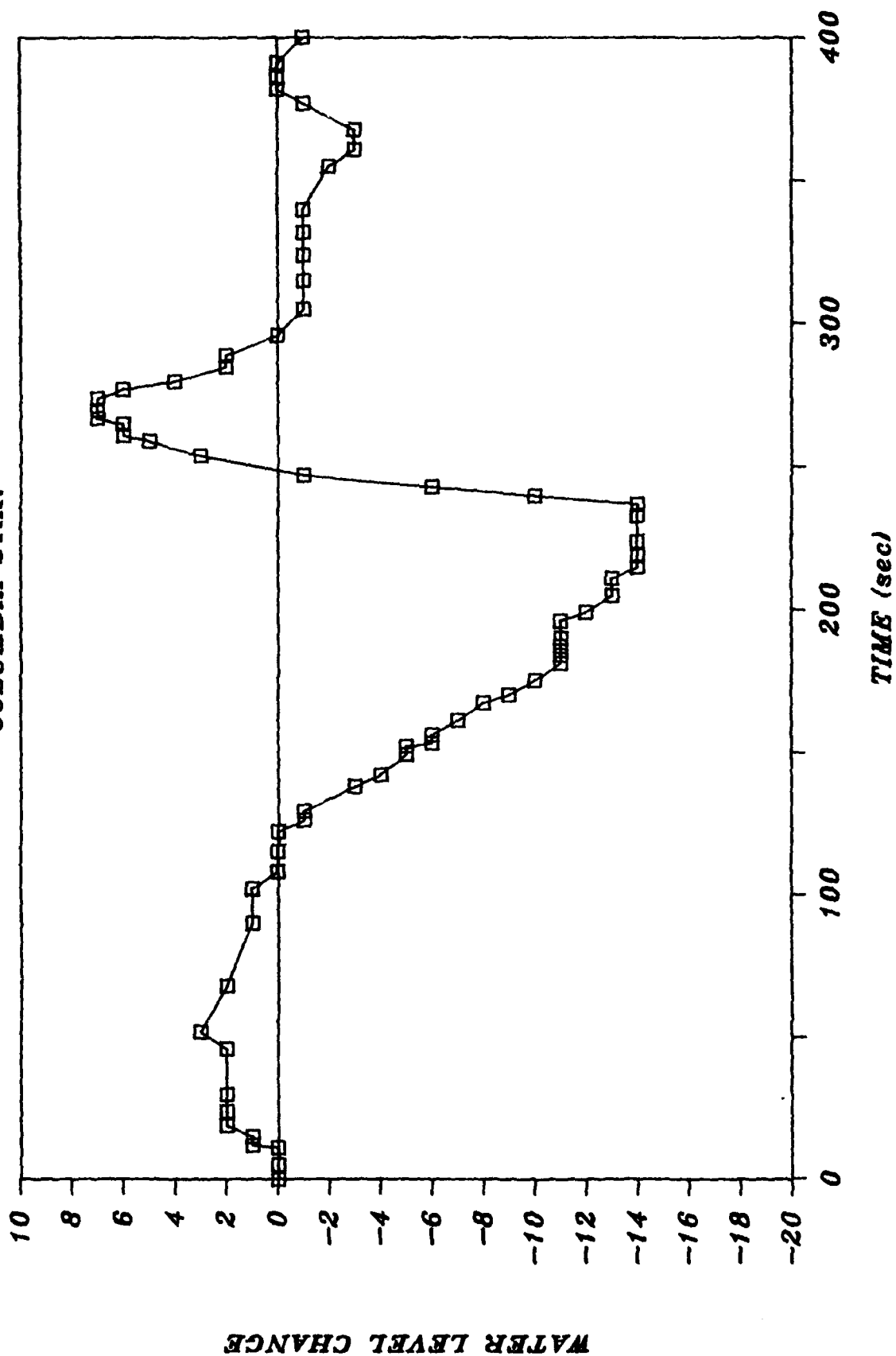
DRAWDOWN DATA (continued)

NAME OF SECTION SAND ISLAND

oo

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
65	377.0	22.0	-1.0
66	382.0	23.0	0.0
67	386.0	23.0	0.0
68	391.0	23.0	0.0
69	400.0	22.0	-1.0
70	413.0	22.0	-1.0
71	425.0	23.0	0.0

SAND ISLAND (red) COLUMBIA STAR



DRAWDOWN DATA

NAME OF SECTION	SAND ISLAND
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

DATE OF OBSERVATION 5/20/85

VESSEL NAME JOSEPH L. BLOCK

DIRECTION	DOWNBOUND
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

VESSEL LENGTH in feet = 728

VESSEL BEAM in feet = 78

VESSEL DRAFT in feet = 27

VESSEL SPEED in feet/sec. = 12.13

BOW ON TIME in sec = 140

STERN ON TIME in sec = 240

DISTANCE TO STAFF GAUGE from green side in feet = 65

BACKGROUND READING in inches = 24

DATA POINT	TIME(sec)	GAUGE READING (in)	CHANGE FROM BG (in)
1	0.0	24.0	0.0
2	32.0	24.0	0.0
3	71.0	24.0	0.0
4	82.0	23.0	-1.0
5	95.0	22.0	-2.0
6	108.0	21.0	-3.0
7	115.0	20.0	-4.0
8	125.0	19.0	-5.0
9	136.0	18.0	-6.0
10	146.0	17.0	-7.0
11	152.0	16.0	-8.0
12	162.0	15.0	-9.0
13	176.0	15.0	-9.0
14	192.0	16.0	-8.0
15	201.0	17.0	-7.0
16	218.0	18.0	-6.0
17	225.0	19.0	-5.0
18	230.0	20.0	-4.0
19	240.0	22.0	-2.0
20	245.0	23.0	-1.0

DRAWDOWN DATA (continued)

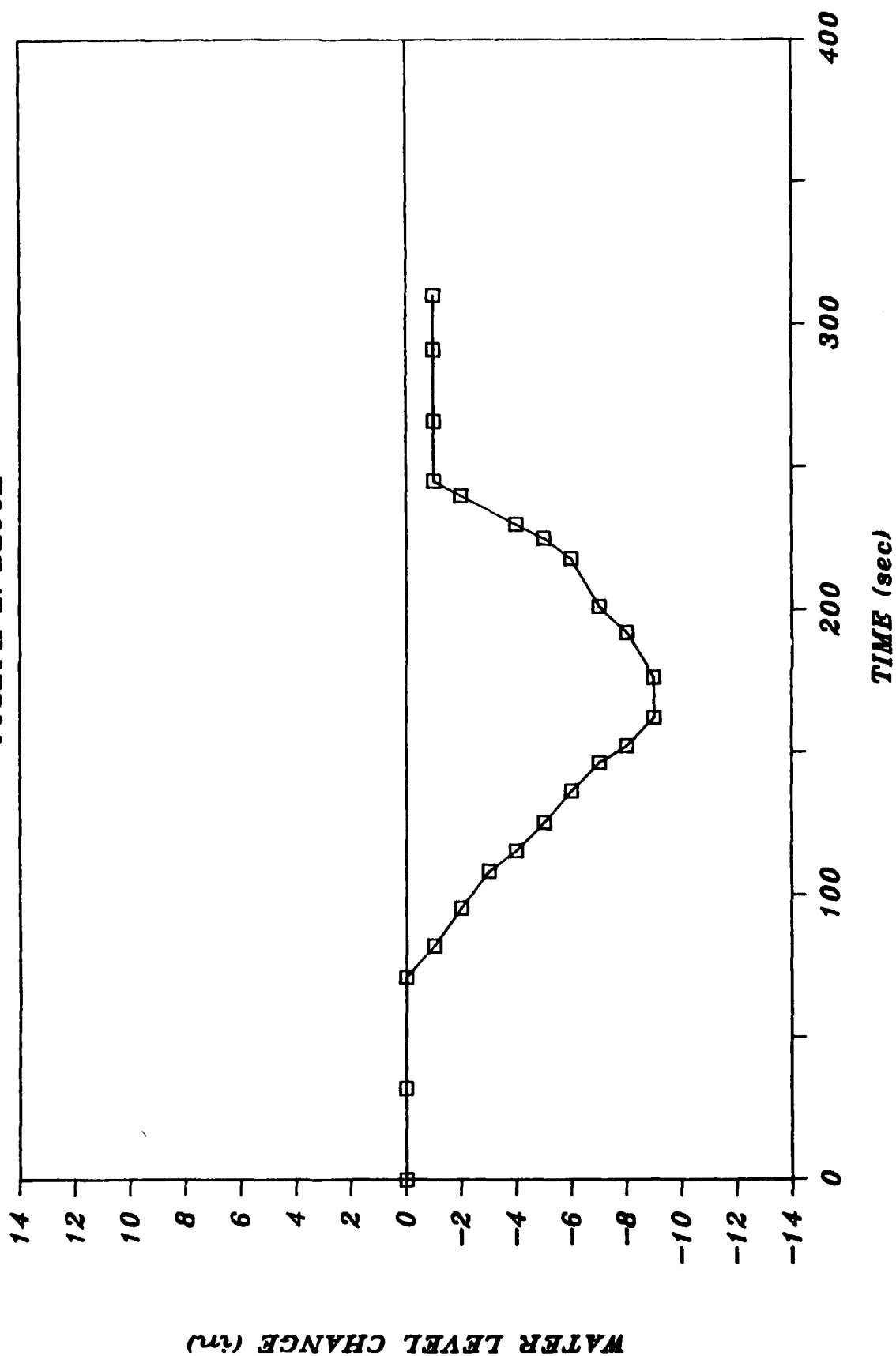
NAME OF SECTION SAND ISLAND

ooo

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	266.0	23.0	-1.0
22	291.0	23.0	-1.0
23	310.0	23.0	-1.0

SAND ISLAND (green)

JOSEPH L. BLOCK



 DRAWDOWN DATA

NAME OF SECTION SAND ISLAND
 #####

DATE OF OBSERVATION 5/20/85

VESSEL NAME JOSEPH L. BLOCK

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 728

VESSEL BEAM in feet = 78

VESSEL DRAFT in feet = 27.0

VESSEL SPEED in feet/sec. = 12.13

BOW ON TIME in sec = 100

STERN ON TIME in sec = 160

DISTANCE TO STAFF GAUGE from green side in feet = 2790

BACKGROUND READING in inches = 23

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	23.0	0.0
2	36.0	23.0	0.0
3	80.0	25.0	2.0
4	104.0	23.0	0.0
5	120.0	20.0	-3.0
6	126.0	19.0	-4.0
7	130.0	17.0	-6.0
8	135.0	15.0	-8.0
9	142.0	14.0	-9.0
10	145.0	13.0	-10.0
11	148.0	12.0	-11.0
12	152.0	11.0	-12.0
13	155.0	11.0	-12.0
14	159.0	10.0	-13.0
15	161.0	9.0	-14.0
16	169.0	9.0	-14.0
17	173.0	10.0	-13.0
18	175.0	15.0	-8.0
19	178.0	17.0	-6.0
20	180.0	19.0	-4.0

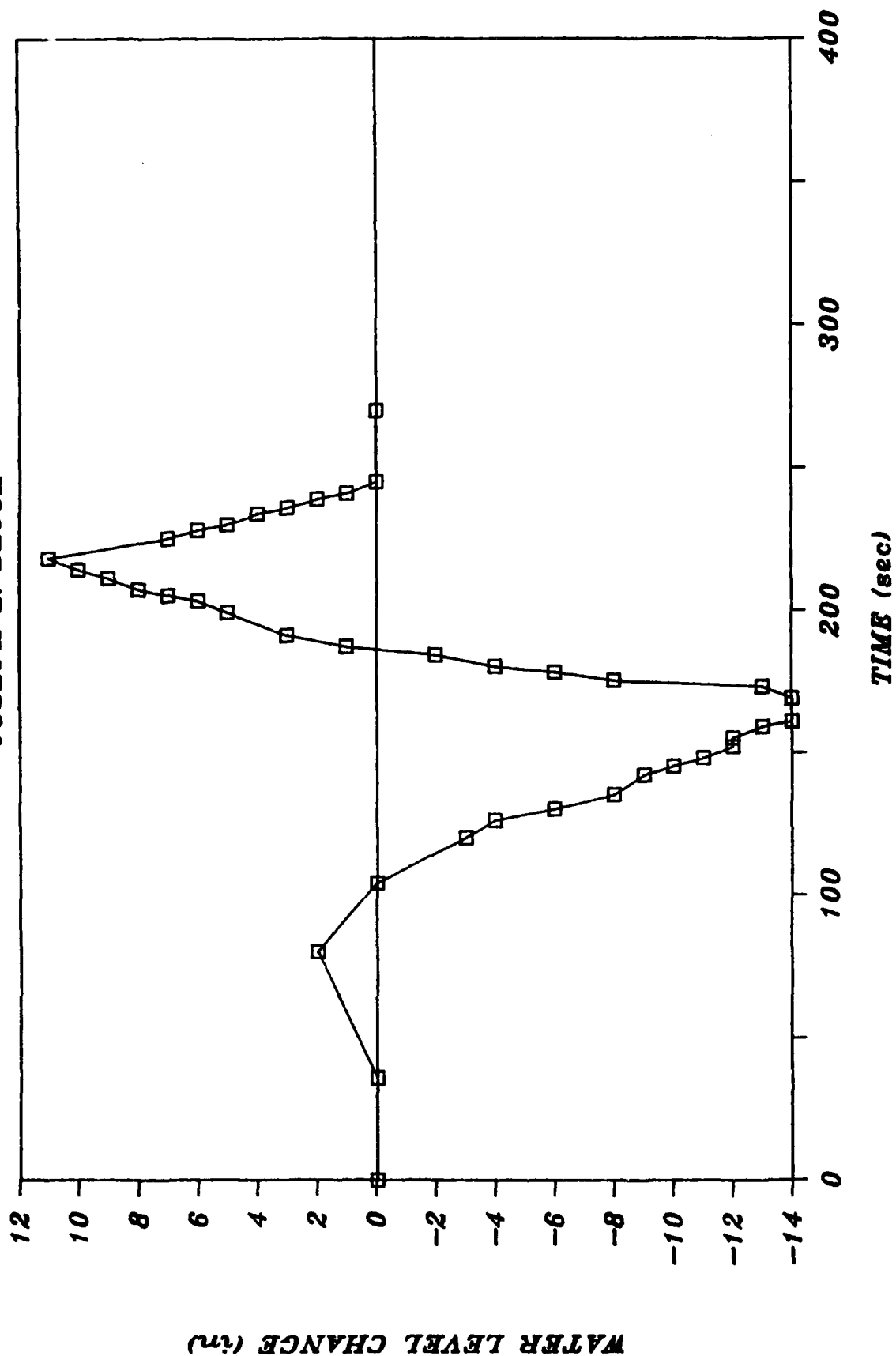
DRAWDOWN DATA (continued)

NAME OF SECTION SAND ISLAND

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	181.0	26.0	3.0
22	184.0	21.0	-2.0
23	187.0	24.0	1.0
24	199.0	28.0	5.0
25	203.0	29.0	6.0
26	205.0	30.0	7.0
27	207.0	31.0	8.0
28	211.0	32.0	9.0
29	214.0	33.0	10.0
30	218.0	34.0	11.0
31	225.0	30.0	7.0
32	228.0	29.0	6.0
33	230.0	28.0	5.0
34	234.0	27.0	4.0
35	236.0	26.0	3.0
36	239.0	25.0	2.0
37	241.0	24.0	1.0
38	245.0	23.0	0.0
39	270.0	23.0	0.0

SAND ISLAND (red)

JOSEPH L. BLOCK



DRAWDOWN DATA

NAME OF SECTION SAND ISLAND

DATE OF OBSERVATION 5/21/85

VESSEL NAME CANADIAN NAVIGATOR

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 25.58

VESSEL SPEED in feet/sec. = 12.8

BOW ON TIME in sec = 115

STERN ON TIME in sec = 172

DISTANCE TO STAFF GAUGE from green side in feet = 65

BACKGROUND READING in inches = 21

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	21.0	0.0
2	18.0	21.0	0.0
3	60.0	21.0	0.0
4	85.0	20.0	-1.0
5	87.0	20.0	-1.0
6	95.0	20.0	-1.0
7	111.0	19.0	-2.0
8	122.0	18.0	-3.0
9	136.0	17.0	-4.0
10	144.0	16.0	-5.0
11	151.0	15.0	-6.0
12	158.0	14.0	-7.0
13	166.0	13.0	-8.0
14	178.0	13.0	-8.0
15	188.0	13.0	-8.0
16	202.0	14.0	-7.0
17	213.0	15.0	-6.0
18	228.0	16.0	-5.0
19	242.0	17.0	-4.0
20	244.0	18.0	-3.0

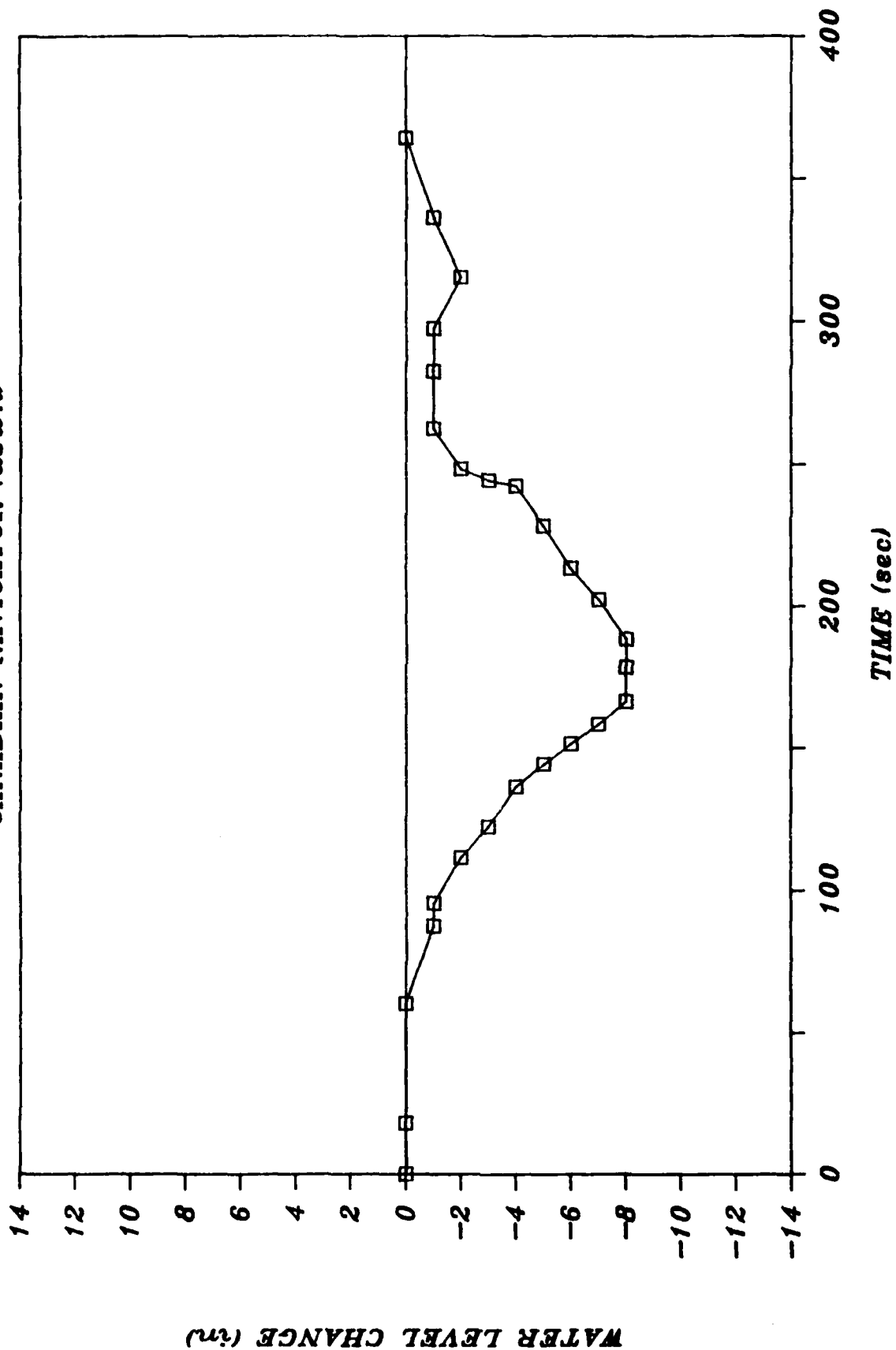
DRAWDOWN DATA (continued)

NAME OF SECTION SAND ISLAND
#####

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	248.0	19.0	-2.0
22	262.0	20.0	-1.0
23	282.0	20.0	-1.0
24	297.0	20.0	-1.0
25	315.0	19.0	-2.0
26	336.0	20.0	-1.0
27	364.0	21.0	0.0

SAND ISLAND (green)

CANADIAN NAVIGATOR (down)



NAME OF SECTION	SAND ISLAND
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

DATE OF OBSERVATION 5/21/85

VESSEL NAME CANADIAN NAVIGATOR

DIRECTION	DOWNBOUND
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 25.58

VESSEL SPEED in feet/sec. = 12.8

BOW ON TIME in sec = 115

STERN ON TIME in sec = 172

DISTANCE TO STAFF GAUGE from green side in feet = 2790

BACKGROUND READING in inches = 21

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	21.0	0.0
2	11.0	21.0	0.0
3	35.0	21.0	0.0
4	62.0	21.0	0.0
5	91.0	21.0	0.0
6	101.0	20.0	-1.0
7	108.0	20.0	-1.0
8	116.0	19.0	-2.0
9	121.0	19.0	-2.0
10	126.0	18.0	-3.0
11	130.0	18.0	-3.0
12	131.0	17.0	-4.0
13	134.0	16.0	-5.0
14	137.0	15.0	-6.0
15	140.0	15.0	-6.0
16	141.0	14.0	-7.0
17	144.0	14.0	-7.0
18	145.0	13.0	-8.0
19	148.0	12.0	-9.0
20	152.0	12.0	-9.0

DRAWDOWN DATA (continued)

NAME OF SECTION SAND ISLAND

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	156.0	11.0	-10.0
22	159.0	10.0	-11.0
23	163.0	9.0	-12.0
24	166.0	8.0	-13.0
25	169.0	7.0	-14.0
26	172.0	7.0	-14.0
27	176.0	6.0	-15.0
28	180.0	6.0	-15.0
29	186.0	7.0	-14.0
30	187.0	8.0	-13.0
31	189.0	10.0	-11.0
32	190.0	11.0	-10.0
33	193.0	13.0	-8.0
34	195.0	13.0	-8.0
35	197.0	14.0	-7.0
36	198.0	16.0	-5.0
37	200.0	17.0	-4.0
38	201.0	19.0	-2.0
39	202.0	21.0	0.0
40	206.0	22.0	1.0
41	208.0	23.0	2.0
42	209.0	24.0	3.0
43	213.0	24.0	3.0
44	216.0	25.0	4.0
45	218.0	26.0	5.0
46	226.0	26.0	5.0
47	230.0	27.0	6.0
48	233.0	26.0	5.0
49	234.0	25.0	4.0
50	238.0	23.0	2.0
51	241.0	23.0	2.0
52	245.0	22.0	1.0
53	247.0	21.0	0.0
54	248.0	20.0	-1.0
55	250.0	19.0	-2.0
56	251.0	19.0	-2.0
57	254.0	18.0	-3.0
58	262.0	18.0	-3.0
59	267.0	19.0	-2.0
60	280.0	19.0	-2.0
61	285.0	20.0	-1.0
62	292.0	20.0	-1.0
63	296.0	19.0	-2.0
64	302.0	18.0	-3.0

#####

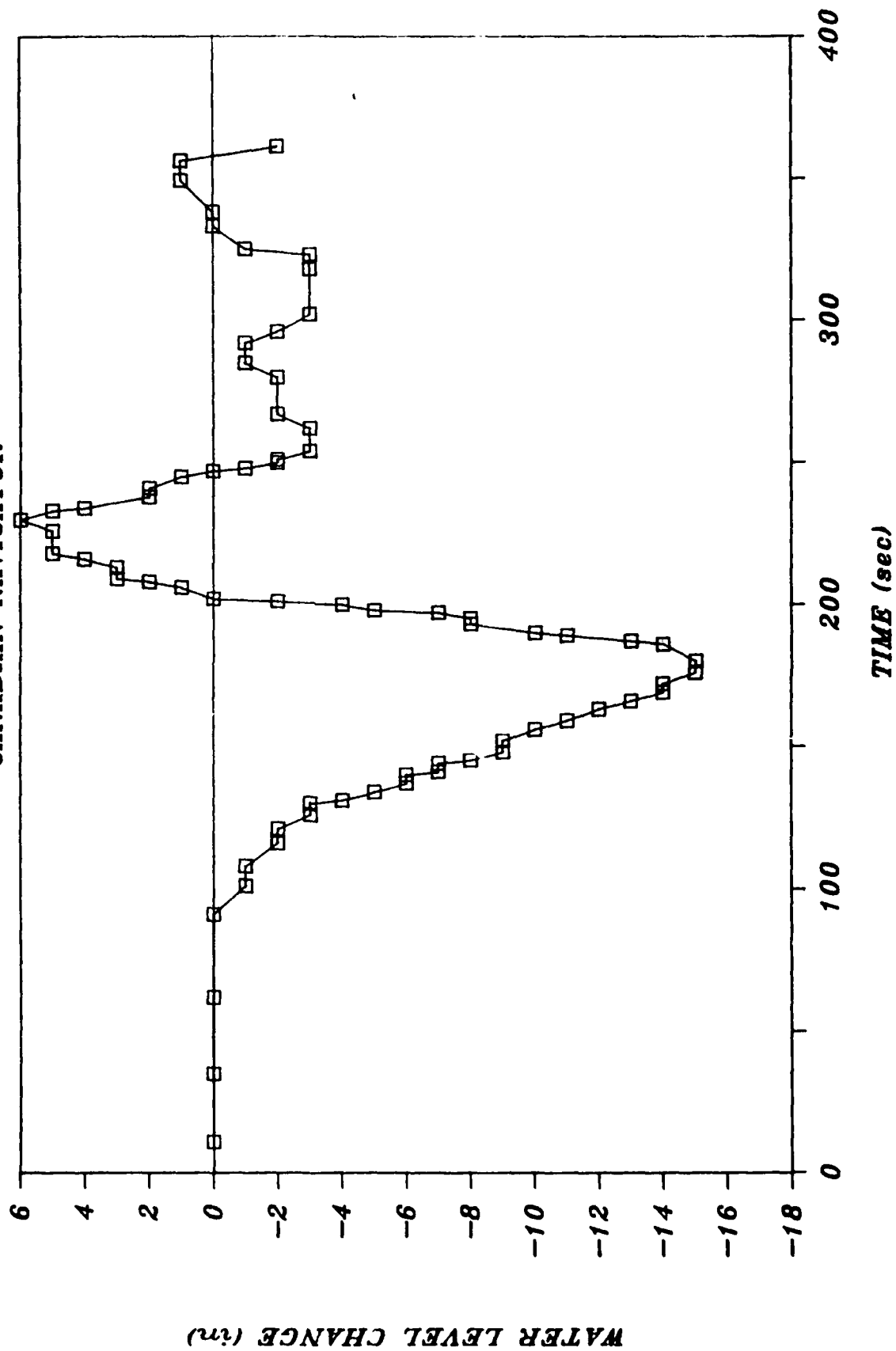
DRAWDOWN DATA (continued)

NAME OF SECTION SAND ISLAND

#####

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
65	318.0	18.0	-3.0
66	323.0	18.0	-3.0
67	325.0	20.0	-1.0
68	333.0	21.0	0.0
69	338.0	21.0	0.0
70	349.0	22.0	1.0
71	356.0	22.0	1.0
72	361.0	19.0	-2.0

SAND ISLAND (red)
CANADIAN NAVIGATOR



NAME OF SECTION SAND ISLAND

DATE OF OBSERVATION 5/21/85

VESSEL NAME EDGAR B. SPEAR

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 1004

VESSEL BEAM in feet = 105

VESSEL DRAFT in feet = 27.25

VESSEL SPEED in feet/sec. = 10.04

BOW ON TIME in sec = 119

STERN ON TIME in sec = 219

DISTANCE TO STAFF GAUGE from green side in feet = 65

BACKGROUND READING in inches = 21

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	21.0	0.0
2	21.0	21.0	0.0
3	28.0	20.0	-1.0
4	47.0	20.0	-1.0
5	60.0	19.0	-2.0
6	66.0	19.0	-2.0
7	76.0	18.0	-3.0
8	92.0	18.0	-3.0
9	100.0	18.0	-3.0
10	110.0	17.0	-4.0
11	115.0	16.0	-5.0
12	130.0	16.0	-5.0
13	131.0	15.0	-6.0
14	140.0	15.0	-6.0
15	144.0	14.0	-7.0
16	154.0	13.0	-8.0
17	170.0	13.0	-8.0
18	175.0	12.0	-9.0
19	189.0	12.0	-9.0
20	193.0	11.0	-10.0

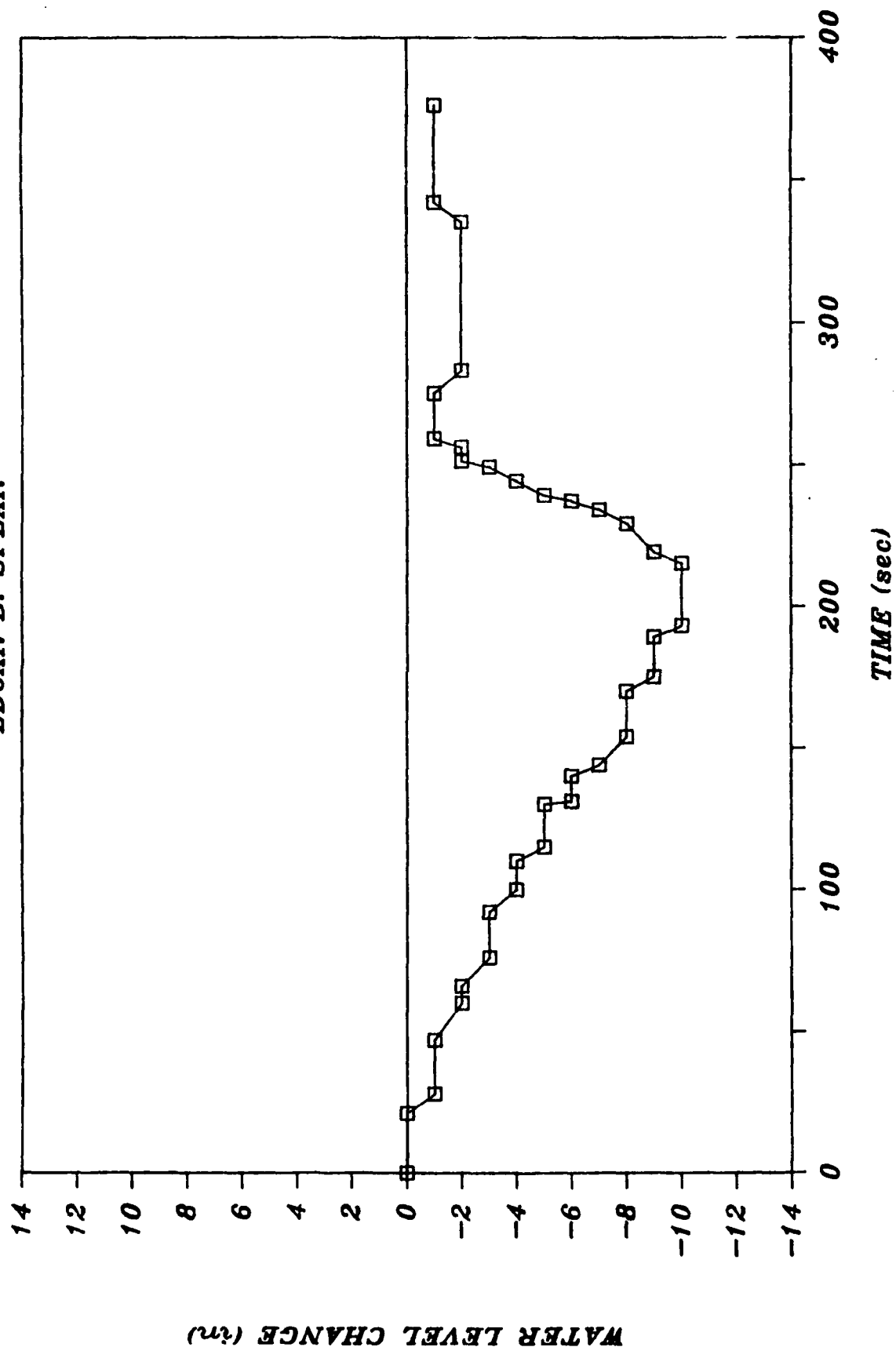
DRAWDOWN DATA (continued)

NAME OF SECTION SAND ISLAND
#####

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	215.0	11.0	-10.0
22	219.0	12.0	-9.0
23	229.0	13.0	-8.0
24	234.0	14.0	-7.0
25	237.0	15.0	-6.0
26	239.0	16.0	-5.0
27	244.0	17.0	-4.0
28	249.0	18.0	-3.0
29	251.0	19.0	-2.0
30	256.0	19.0	-2.0
31	259.0	20.0	-1.0
32	275.0	20.0	-1.0
33	283.0	19.0	-2.0
34	335.0	19.0	-2.0
35	342.0	20.0	-1.0

SAND ISLAND (green)

EDGAR B. SPEAR



DRAWDOWN DATA

NAME OF SECTION	SAND ISLAND
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

DATE OF OBSERVATION 5/21/85

VESSEL NAME **EDGAR B. SPEAR**

DIRECTION	DOWNBOUND
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

VESSEL LENGTH in feet = 1004

VESSEL BEAM in feet = 105

VESSEL DRAFT in feet = 27.25

VESSEL SPEED in feet/sec. = 10.04

BOW ON TIME in sec = 119

STERN ON TIME in sec = 219

DISTANCE TO STAFF GAUGE from green side in feet = 2790

BACKGROUND READING in inches = 21

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	21.0	0.0
2	30.0	21.0	0.0
3	61.0	20.0	-1.0
4	92.0	20.0	-1.0
5	96.0	19.0	-2.0
6	109.0	19.0	-2.0
7	115.0	18.0	-3.0
8	130.0	18.0	-3.0
9	133.0	17.0	-4.0
10	140.0	16.0	-5.0
11	143.0	15.0	-6.0
12	145.0	15.0	-6.0
13	148.0	14.0	-7.0
14	150.0	13.0	-8.0
15	152.0	13.0	-8.0
16	155.0	12.0	-9.0
17	158.0	12.0	-9.0
18	160.0	11.0	-10.0
19	164.0	11.0	-10.0
20	169.0	10.0	-11.0

#####

DRAWDOWN DATA (continued)

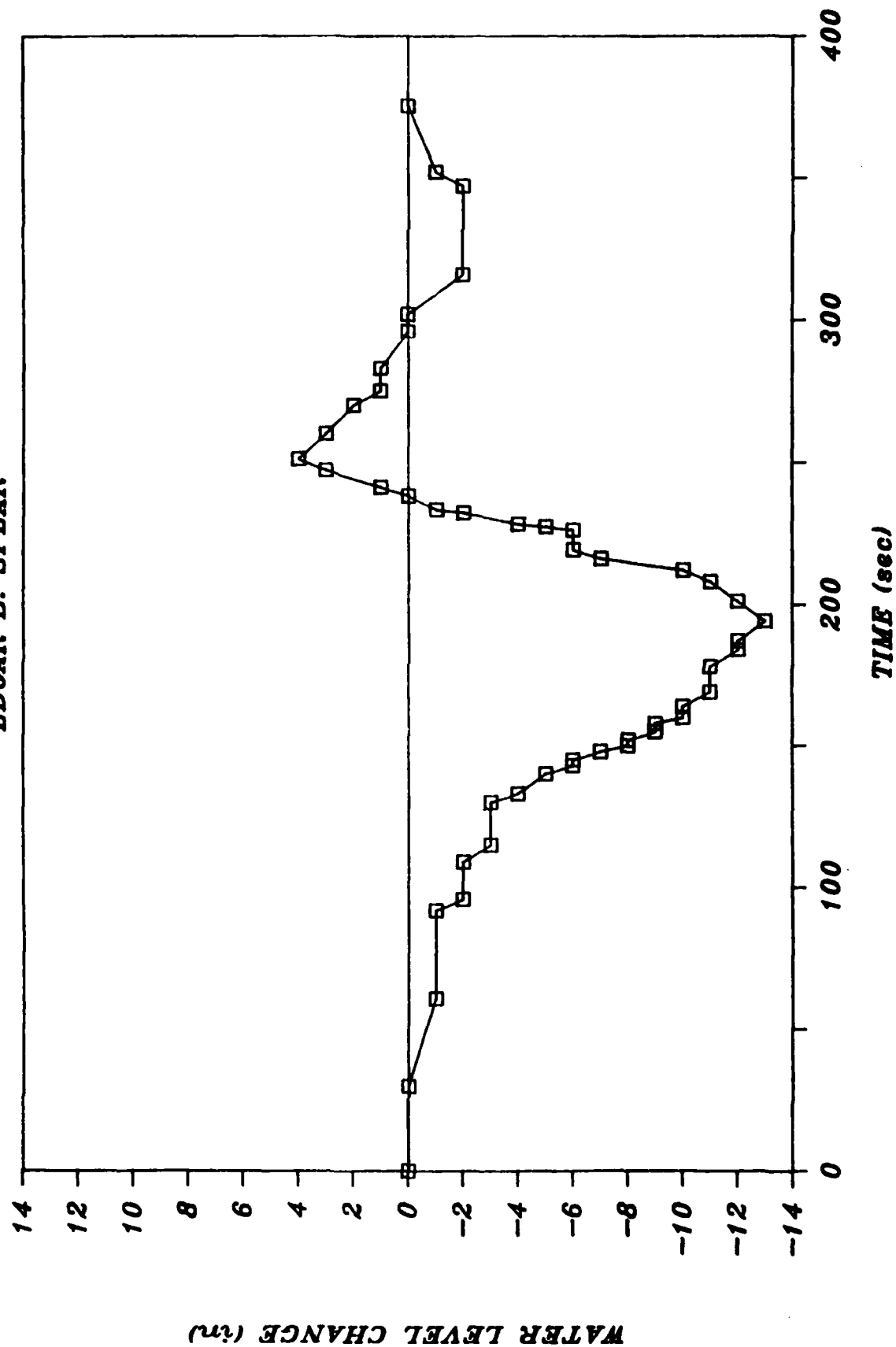
NAME OF SECTION SAND ISLAND

#####

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	178.0	10.0	-11.0
22	184.0	9.0	-12.0
23	187.0	9.0	-12.0
24	194.0	8.0	-13.0
25	201.0	9.0	-12.0
26	208.0	10.0	-11.0
27	212.0	11.0	-10.0
28	216.0	14.0	-7.0
29	219.0	15.0	-6.0
30	226.0	15.0	-6.0
31	227.0	16.0	-5.0
32	228.0	17.0	-4.0
33	232.0	19.0	-2.0
34	233.0	20.0	-1.0
35	238.0	21.0	0.0
36	241.0	22.0	1.0
37	247.0	24.0	3.0
38	251.0	25.0	4.0
39	260.0	24.0	3.0
40	270.0	23.0	2.0
41	275.0	22.0	1.0
42	283.0	22.0	1.0
43	296.0	21.0	0.0
44	302.0	21.0	0.0
45	316.0	19.0	-2.0
46	347.0	19.0	-2.0
47	352.0	20.0	-1.0
48	375.0	21.0	0.0

SAND ISLAND (red)

EDGAR B. SPEAR



NAME OF SECTION SAND ISLAND

BACKGROUND READING in inches = 22

BB80

#####

DRAWDOWN: DATA (continued)

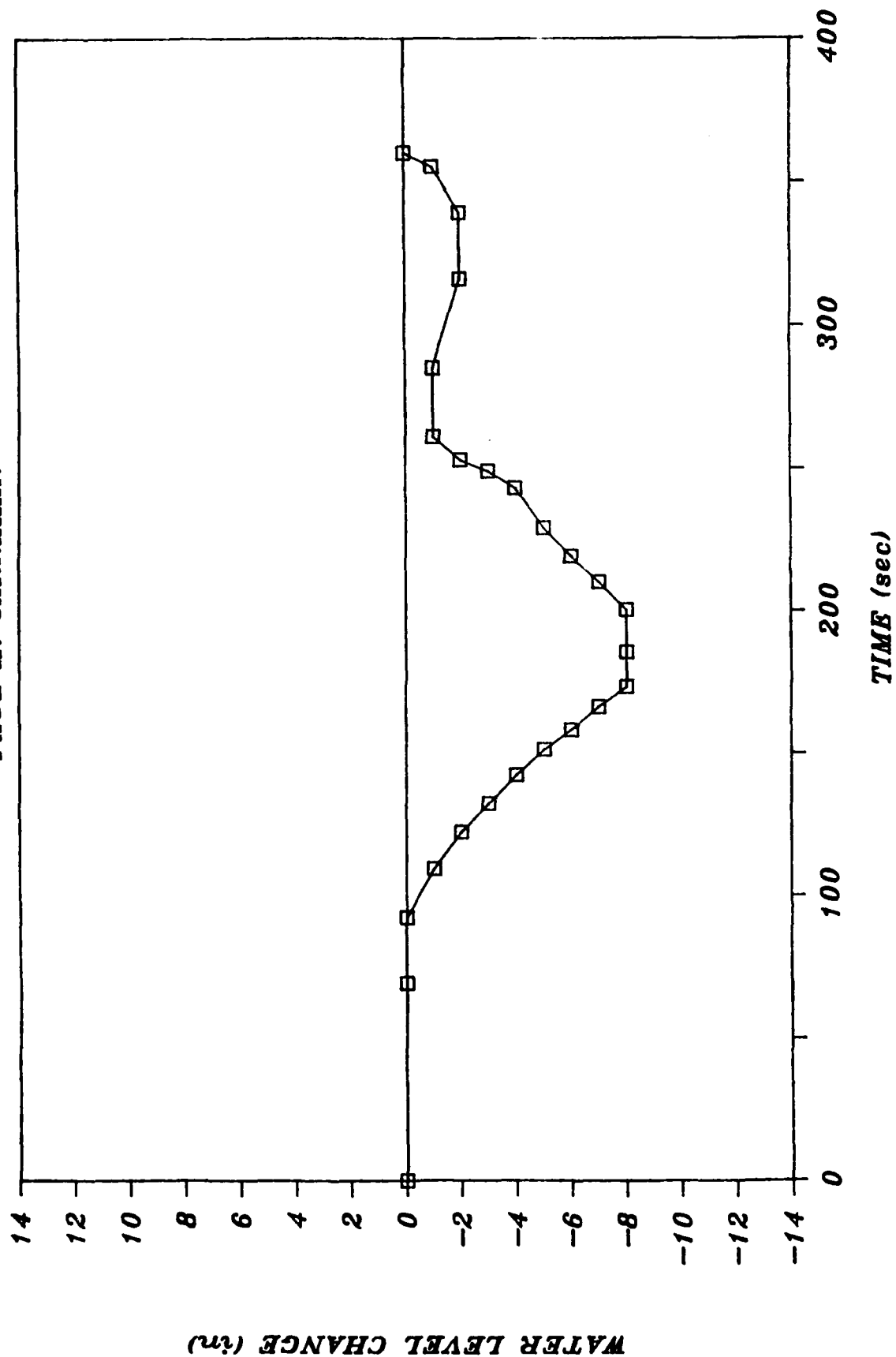
NAME OF SECTION SAND ISLAND

#####

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	285.0	21.0	-1.0
22	316.0	20.0	-2.0
23	339.0	20.0	-2.0
24	355.0	21.0	-1.0
25	360.0	22.0	0.0

SAND ISLAND (green)

PAUL H. CARNAHAN



DRAWDOWN DATA

NAME OF SECTION	SAND ISLAND
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

DATE OF OBSERVATION 5/21/85

VESSEL NAME PAUL H. CARNAHAN

DIRECTION	DOWNBOUND
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 27.5

VESSEL SPEED in feet/sec. = 11.97

BOW ON TIME in sec = 117

STERN ON TIME in sec = 178

DISTANCE TO STAFF GAUGE from green side in feet = 2790

BACKGROUND READING in inches = 22

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	22.0	0.0
2	10.0	22.0	0.0
3	15.0	23.0	1.0
4	36.0	23.0	1.0
5	80.0	23.0	1.0
6	89.0	22.0	0.0
7	93.0	22.0	0.0
8	102.0	21.0	-1.0
9	121.0	21.0	-1.0
10	126.0	20.0	-2.0
11	130.0	19.0	-3.0
12	136.0	19.0	-3.0
13	137.0	18.0	-4.0
14	142.0	17.0	-5.0
15	146.0	16.0	-6.0
16	149.0	15.0	-7.0
17	151.0	14.0	-8.0
18	154.0	13.0	-9.0
19	156.0	12.0	-10.0
20	159.0	12.0	-10.0

DRAWDOWN DATA (continued)

[illegible]

BB84

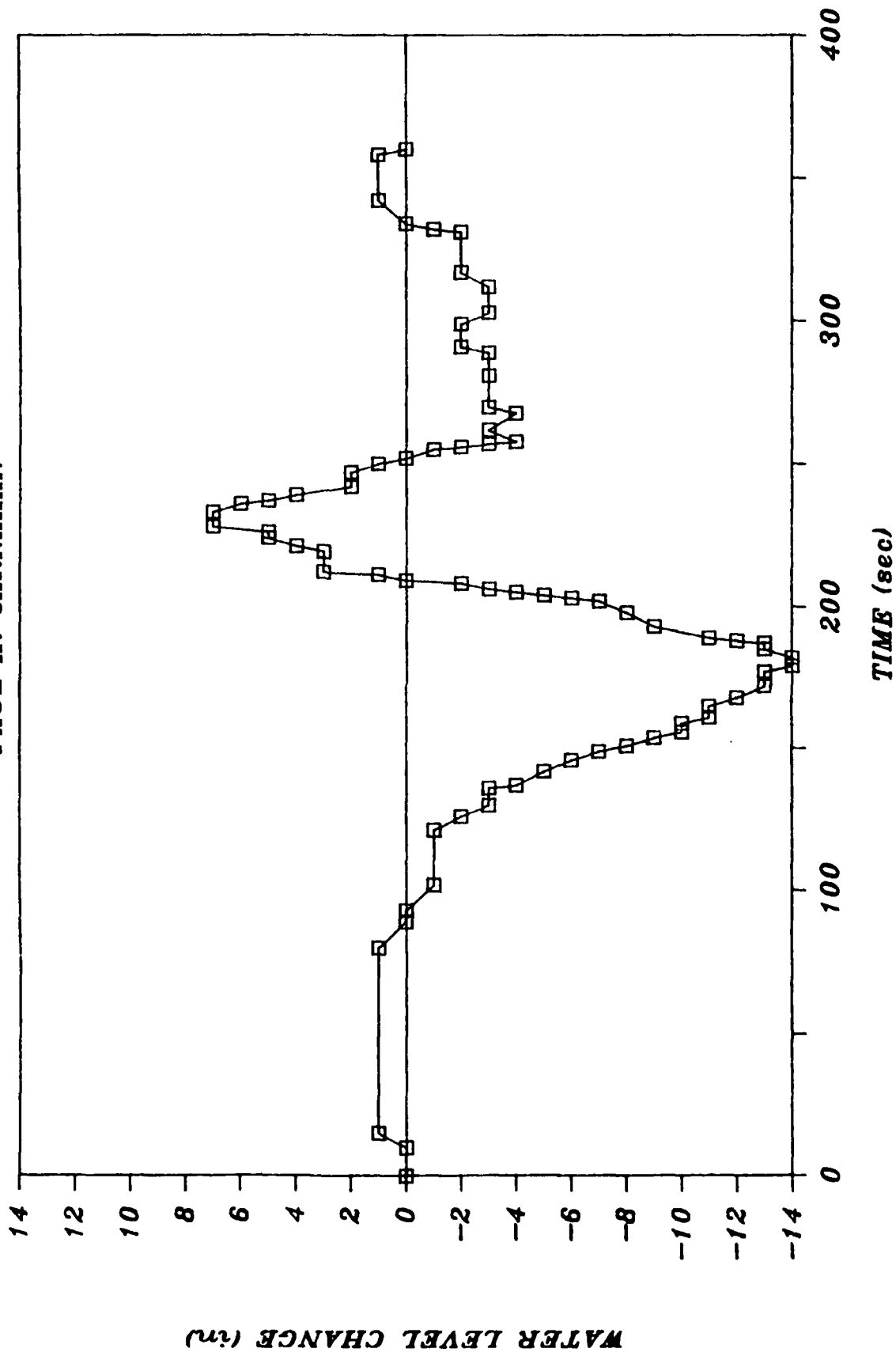
DRAWDOWN DATA (continued)

NAME OF SECTION SAND ISLAND
#####

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
65	291.0	20.0	-2.0
66	299.0	20.0	-2.0
67	303.0	19.0	-3.0
68	312.0	19.0	-3.0
69	317.0	20.0	-2.0
70	331.0	20.0	-2.0
71	332.0	21.0	-1.0
72	334.0	22.0	0.0
73	342.0	23.0	1.0
74	358.0	23.0	1.0
75	360.0	22.0	0.0

SAND ISLAND (red)

PAUL H. CARNAHAN



 DRAWDOWN DATA

NAME OF SECTION SAND ISLAND
 #####

DATE OF OBSERVATION 5/21/85

VESSEL NAME FRED R. WHITE

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 635

VESSEL BEAM in feet = 68

VESSEL DRAFT in feet = 27.5

VESSEL SPEED in feet/sec. = 11.98

BOW ON TIME in sec = 104

STERN ON TIME in sec = 157

DISTANCE TO STAFF GAUGE from green side in feet = 65

BACKGROUND READING in inches = 23

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	23.0	0.0
2	12.0	23.0	0.0
3	19.0	24.0	1.0
4	32.0	24.0	1.0
5	57.0	24.0	1.0
6	70.0	23.0	0.0
7	85.0	22.0	-1.0
8	90.0	23.0	0.0
9	98.0	22.0	-1.0
10	104.0	21.0	-2.0
11	107.0	21.0	-2.0
12	110.0	20.0	-3.0
13	116.0	20.0	-3.0
14	116.0	20.0	-3.0
15	120.0	19.0	-4.0
16	120.0	19.0	-4.0
17	123.0	19.0	-4.0
18	126.0	19.0	-4.0
19	130.0	18.0	-5.0
20	133.0	18.0	-5.0

EE

DRAWDOWN DATA (continued)

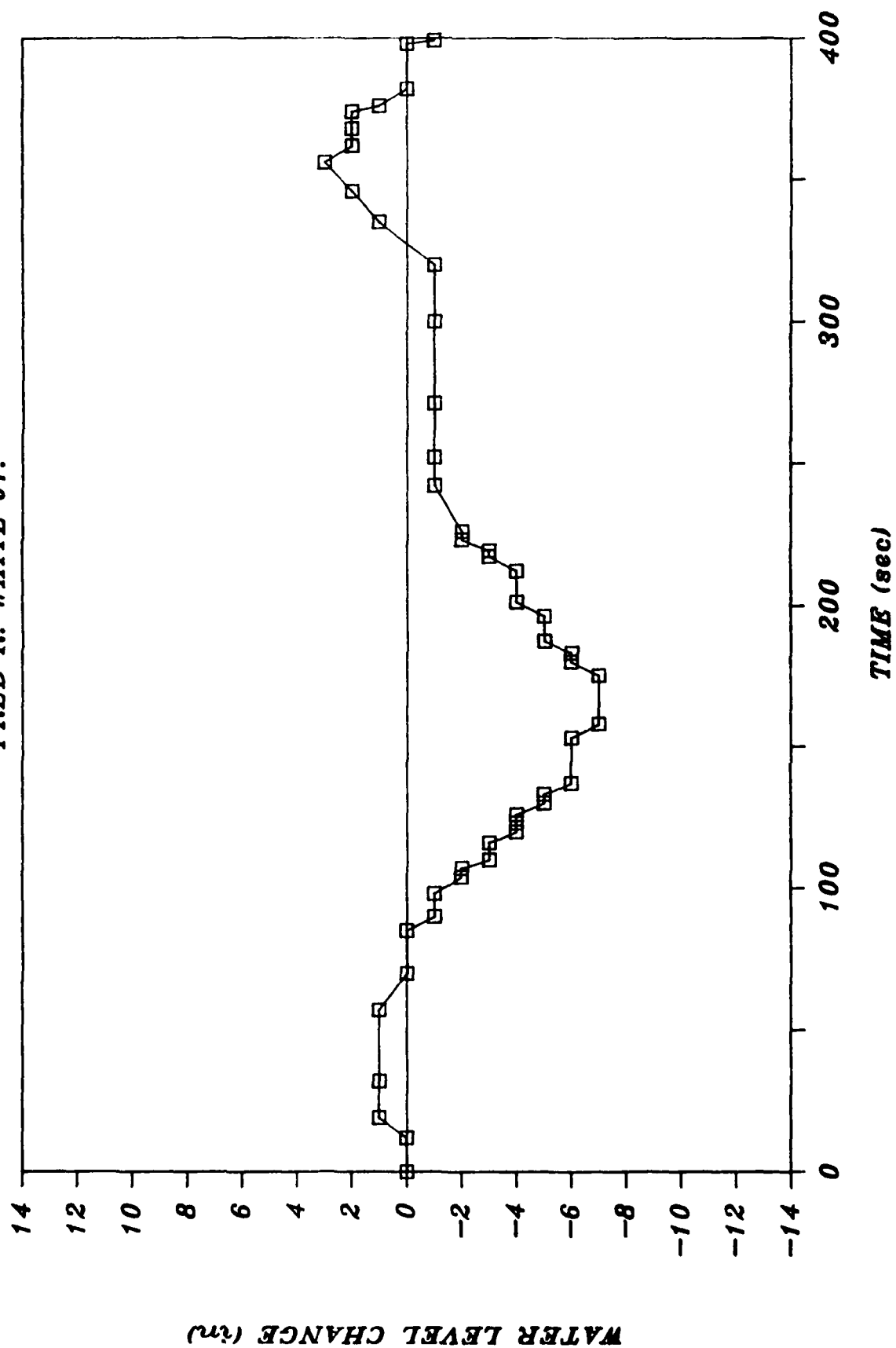
NAME OF SECTION SAND ISLAND

EE

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	137.0	17.0	-6.0
22	153.0	17.0	-6.0
23	158.0	16.0	-7.0
24	175.0	16.0	-7.0
25	180.0	17.0	-6.0
26	183.0	17.0	-6.0
27	187.0	18.0	-5.0
28	196.0	18.0	-5.0
29	201.0	19.0	-4.0
30	212.0	19.0	-4.0
31	217.0	20.0	-3.0
32	219.0	20.0	-3.0
33	223.0	21.0	-2.0
34	226.0	21.0	-2.0
35	242.0	22.0	-1.0
36	252.0	22.0	-1.0
37	271.0	22.0	-1.0
38	300.0	22.0	-1.0
39	320.0	22.0	-1.0
40	335.0	24.0	1.0
41	346.0	25.0	2.0
42	356.0	26.0	3.0
43	362.0	25.0	2.0
44	368.0	25.0	2.0
45	374.0	25.0	2.0
46	376.0	24.0	1.0
47	382.0	23.0	0.0
48	398.0	23.0	0.0
49	399.0	22.0	-1.0

SAND ISLAND (green)

FRED R. WHITE Jr.



 DRAWDOWN DATA

NAME OF SECTION SAND ISLAND
 #####

DATE OF OBSERVATION 6/25/85

VESSEL NAME CHARLES M. BEEGHLY

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 806

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 28.5

VESSEL SPEED in feet/sec. = 11.35

BOW ON TIME in sec = 62

STERN ON TIME in sec = 133

DISTANCE TO STAFF GAUGE from green side in feet = 40

BACKGROUND READING in inches = 24

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	24.0	0.0
2	18.0	24.0	0.0
3	27.0	23.5	-0.5
4	32.0	23.0	-1.0
5	45.0	22.5	-1.5
6	50.0	22.0	-2.0
7	65.0	21.0	-3.0
8	72.0	20.5	-3.5
9	76.0	20.0	-4.0
10	83.0	19.5	-4.5
11	87.0	19.0	-5.0
12	92.0	19.0	-5.0
13	100.0	18.5	-5.5
14	107.0	18.0	-6.0
15	114.0	18.0	-6.0
16	121.0	17.5	-6.5
17	137.0	18.0	-6.0
18	145.0	18.5	-5.5
19	149.0	19.0	-5.0
20	152.0	19.5	-4.5

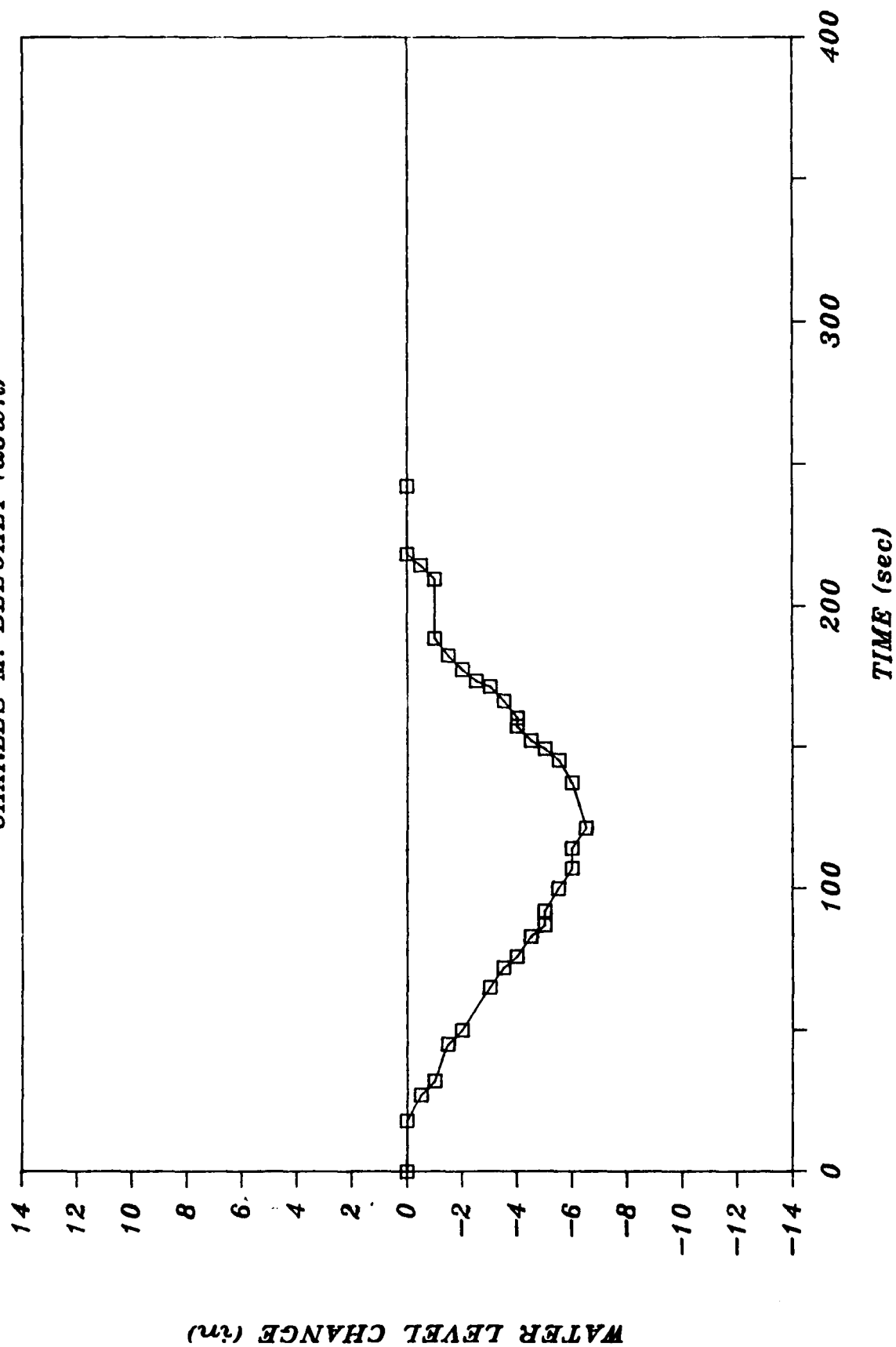
DRAWDOWN DATA (continued)

NAME OF SECTION SAND ISLAND

DATA POINT	TIME(sec)	READING(in)	FROM BG(in)
21	157.0	20.0	-4.0
22	160.0	20.0	-4.0
23	166.0	20.5	-3.5
24	171.0	21.0	-3.0
25	173.0	21.5	-2.5
26	177.0	22.0	-2.0
27	182.0	22.5	-1.5
28	188.0	23.0	-1.0
29	209.0	23.0	-1.0
30	214.0	23.5	-0.5
31	218.0	24.0	0.0
32	242.0	24.0	0.0

SAND ISLAND (green)

CHARLES M. BEECHLY (down)



DRAWDOWN DATA

NAME OF SECTION SAND ISLAND

DATE OF OBSERVATION 6/25/85

VESSEL NAME CHARLES M. BEEGLY

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 806

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 28.5

VESSEL SPEED in feet/sec. = 11.35

BOW ON TIME in sec = 62

STERN ON TIME in sec = 133

DISTANCE TO STAFF GAUGE from green side in feet = 2790

BACKGROUND READING in inches = 19

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	19.0	0.0
2	4.0	19.0	0.0
3	33.0	18.0	-1.0
4	46.0	18.0	-1.0
5	60.0	17.0	-2.0
6	73.0	16.0	-3.0
7	77.0	15.0	-4.0
8	83.0	14.0	-5.0
9	88.0	14.0	-5.0
10	93.0	13.0	-6.0
11	97.0	12.0	-7.0
12	103.0	11.0	-8.0
13	111.0	10.0	-9.0
14	123.0	10.0	-9.0
15	128.0	11.0	-8.0
16	138.0	13.0	-6.0
17	140.0	14.0	-5.0
18	142.0	15.0	-4.0
19	146.0	16.0	-3.0
20	155.0	17.0	-2.0

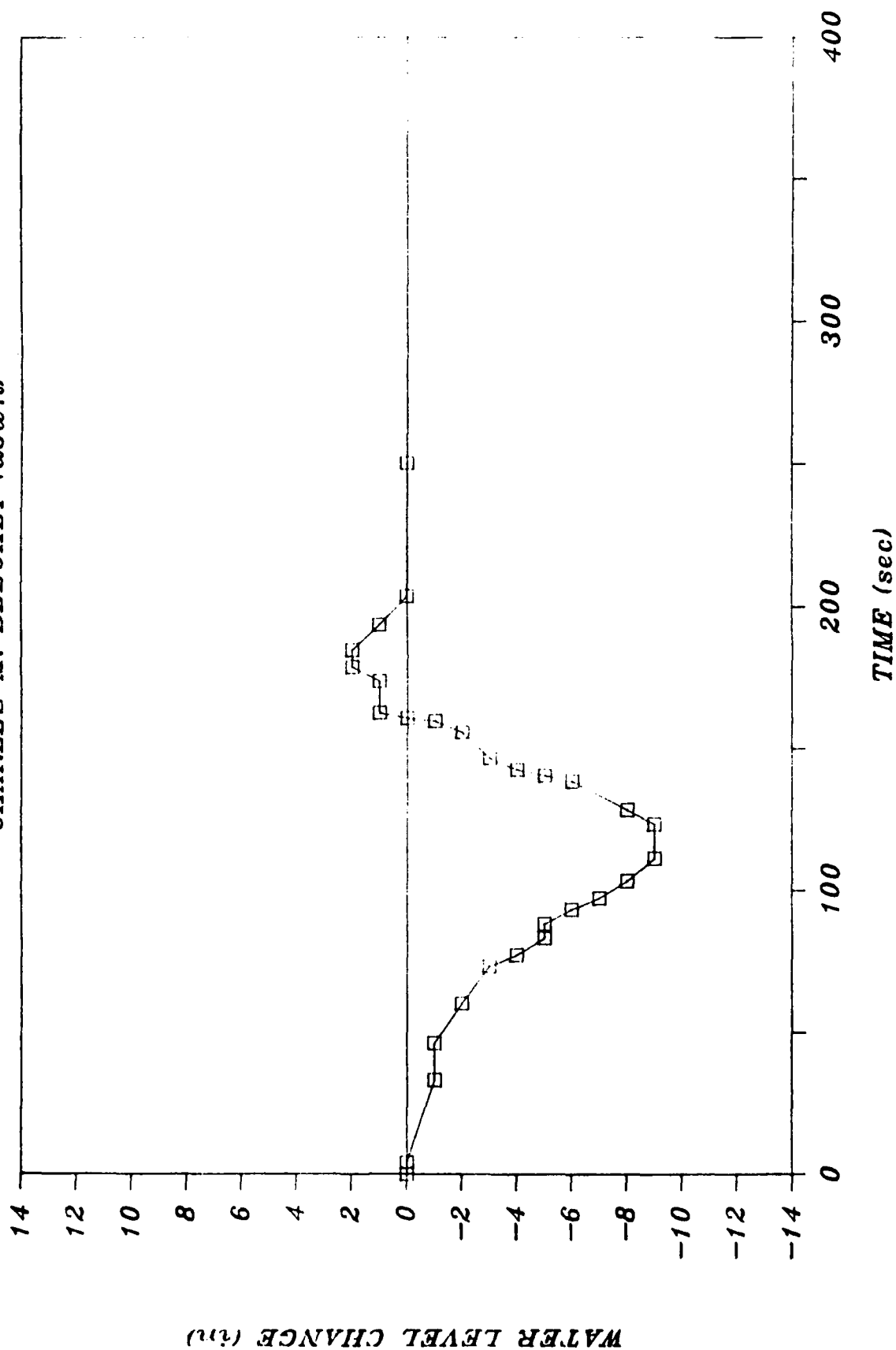
DRAWDOWN DATA (continued)

NAME OF SECTION SAND ISLAND

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	159.0	18.0	-1.0
22	160.0	19.0	0.0
23	162.0	20.0	1.0
24	173.0	20.0	1.0
25	178.0	21.0	2.0
26	184.0	21.0	2.0
27	193.0	20.0	1.0
28	203.0	19.0	0.0
29	250.0	19.0	0.0

SAND ISLAND (red)

CHARLES M. BEECHLY (down)



 DRAWDOWN DATA

NAME OF SECTION SAND ISLAND
 #####

DATE OF OBSERVATION 6/25/85

VESSEL NAME STEWART J. CORT

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 1000

VESSEL BEAM in feet = 105

VESSEL DRAFT in feet = 27.5

VESSEL SPEED in feet/sec. = 10.75

BOW ON TIME in sec = 102

STERN ON TIME in sec = 195

DISTANCE TO STAFF GAUGE from green side in feet = 40

BACKGROUND READING in inches = 23

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	23.0	0.0
2	12.0	24.0	1.0
3	17.0	24.0	1.0
4	39.0	23.0	0.0
5	50.0	23.0	0.0
6	69.0	22.0	-1.0
7	86.0	21.5	-1.5
8	90.0	21.0	-2.0
9	99.0	20.5	-2.5
10	108.0	20.0	-3.0
11	116.0	19.5	-3.5
12	121.0	19.0	-4.0
13	129.0	18.5	-4.5
14	133.0	18.0	-5.0
15	137.0	18.0	-5.0
16	145.0	17.5	-5.5
17	151.0	17.0	-6.0
18	159.0	17.0	-6.0
19	170.0	16.5	-6.5
20	176.0	16.0	-7.0

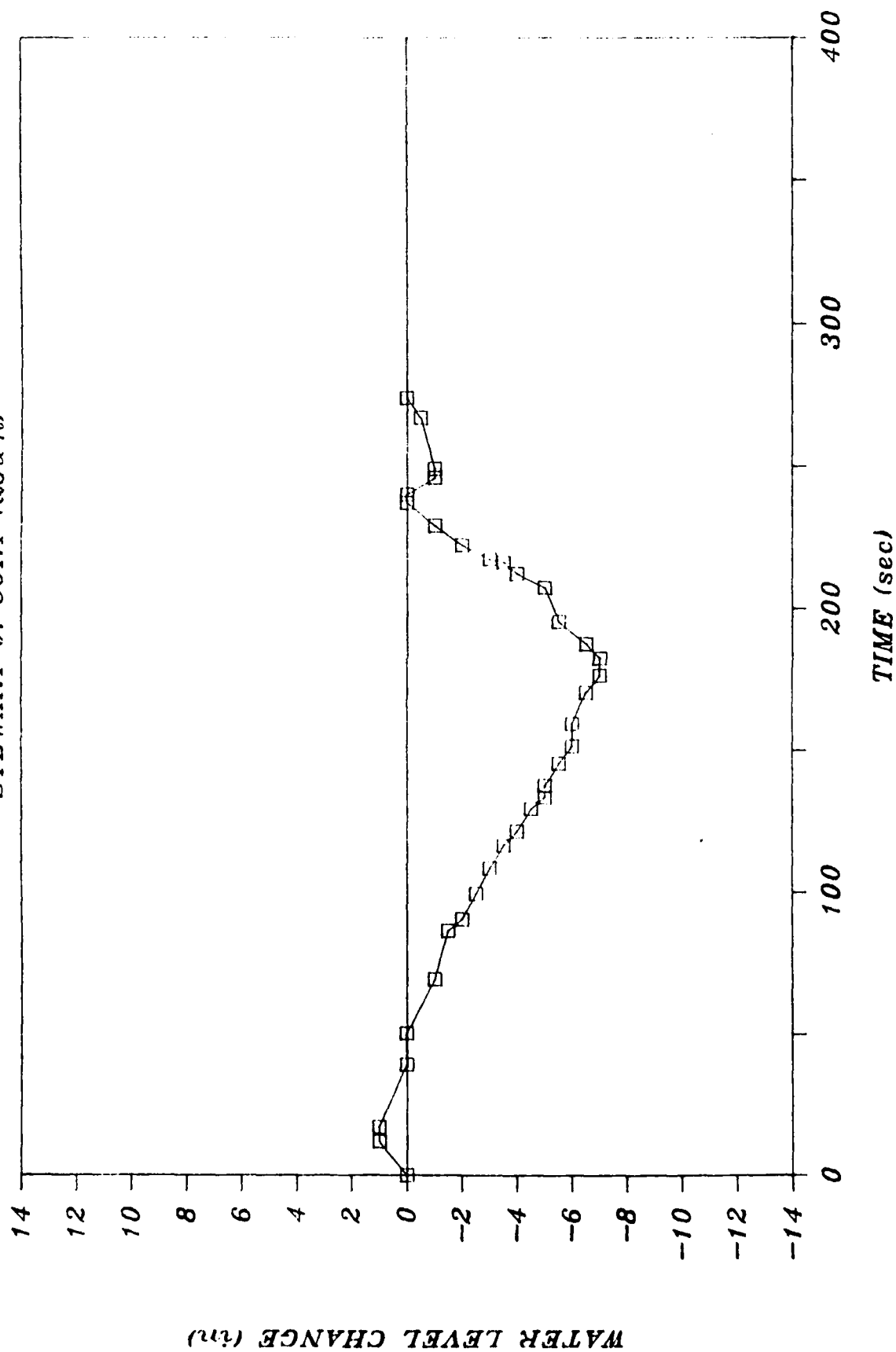
DRAWDOWN DATA (continued)

NAME OF SECTION SAND ISLAND

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	182.0	16.0	-7.0
22	187.0	16.5	-6.5
23	195.0	17.5	-5.5
24	207.0	18.0	-5.0
25	212.0	19.0	-4.0
26	216.0	19.5	-3.5
27	217.0	20.0	-3.0
28	222.0	21.0	-2.0
29	229.0	22.0	-1.0
30	237.0	23.0	0.0
31	240.0	23.0	0.0
32	246.0	22.0	-1.0
33	249.0	22.0	-1.0
34	267.0	22.5	-0.5
35	274.0	23.0	0.0

SAND ISLAND (green)

STEWART J. CORT (down)



@@
 DRAWDOWN DATA

NAME OF SECTION SAND ISLAND
 @@

DATE OF OBSERVATION 6/25/85
 VESSEL NAME STEWART J. CORT
 DIRECTION DOWNBOUND
 VESSEL LENGTH in feet = 1000
 VESSEL BEAM in feet = 105
 VESSEL DRAFT in feet = 27.5
 VESSEL SPEED in feet/sec. = 10.75
 BOW ON TIME in sec = 102
 STERN ON TIME in sec = 195
 DISTANCE TO STAFF GAUGE from green side in feet = 2790
 BACKGROUND READING in inches = 19

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	19.0	0.0
2	20.0	19.0	0.0
3	56.0	18.0	-1.0
4	76.0	18.0	-1.0
5	89.0	17.0	-2.0
6	102.0	16.0	-3.0
7	108.0	16.0	-3.0
8	114.0	15.0	-4.0
9	118.0	14.0	-5.0
10	128.0	14.0	-5.0
11	130.0	13.0	-6.0
12	132.0	12.0	-7.0
13	136.0	12.0	-7.0
14	138.0	11.0	-8.0
15	142.0	10.0	-9.0
16	151.0	9.0	-10.0
17	157.0	9.0	-10.0
18	160.0	8.0	-11.0
19	169.0	8.0	-11.0
20	185.0	8.0	-11.0

#####

DRAWDOWN DATA (continued)

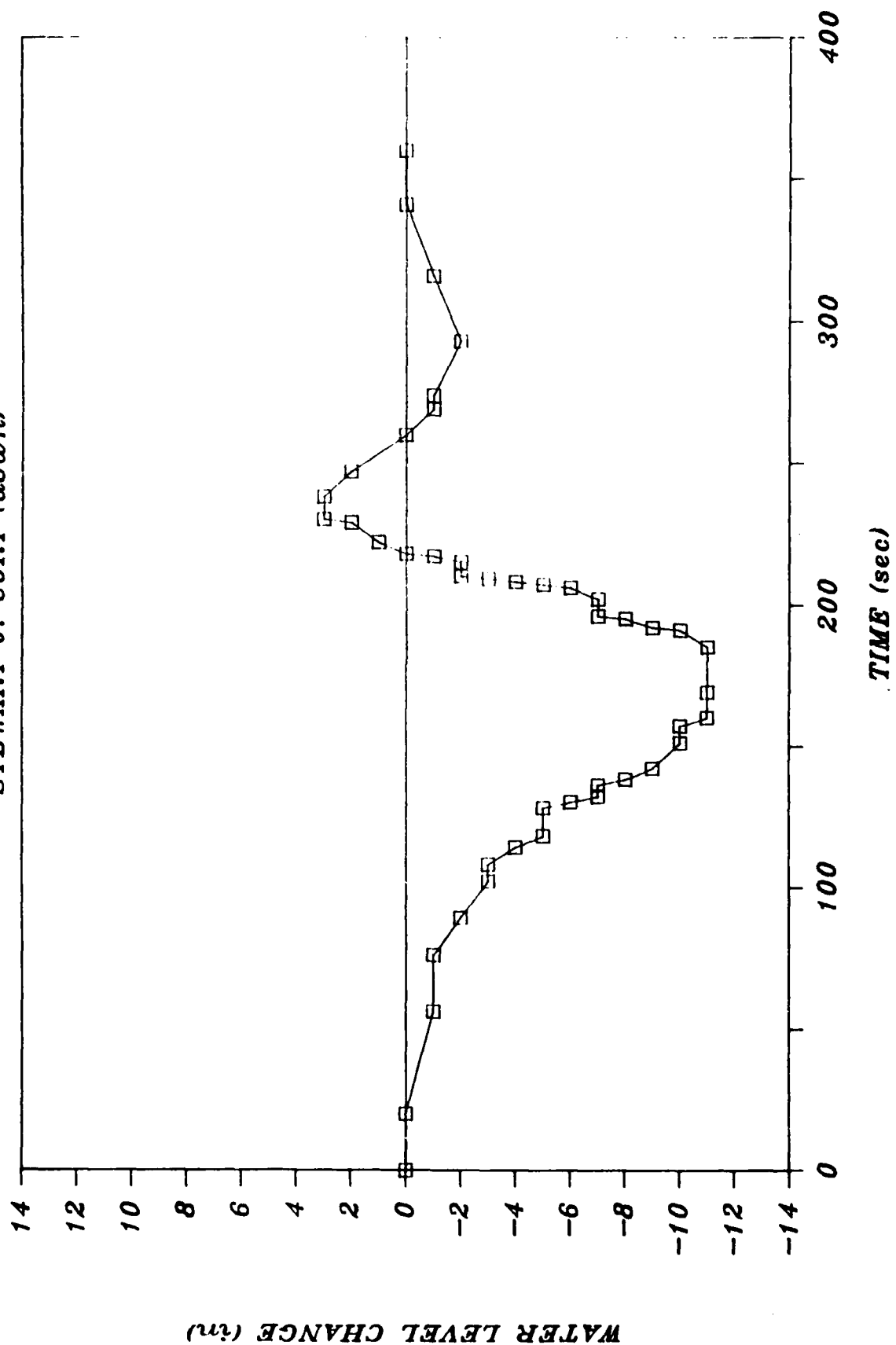
NAME OF SECTION SAND ISLAND

#####

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	191.0	9.0	-10.0
22	192.0	10.0	-9.0
23	195.0	11.0	-8.0
24	196.0	12.0	-7.0
25	202.0	12.0	-7.0
26	206.0	13.0	-6.0
27	207.0	14.0	-5.0
28	208.0	15.0	-4.0
29	209.0	16.0	-3.0
30	210.0	17.0	-2.0
31	215.0	17.0	-2.0
32	217.0	18.0	-1.0
33	218.0	19.0	0.0
34	222.0	20.0	1.0
35	229.0	21.0	2.0
36	230.0	22.0	3.0
37	238.0	22.0	3.0
38	247.0	21.0	2.0
39	260.0	19.0	0.0
40	269.0	18.0	-1.0
41	274.0	18.0	-1.0
42	293.0	17.0	-2.0
43	316.0	18.0	-1.0
44	341.0	19.0	0.0
45	360.0	19.0	0.0

SAND ISLAND (red)

STEWART J. CORT (down)



DRAWN DATA

NAME OF SECTION	SAND ISLAND
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

DATE OF OBSERVATION 6/25/85

VESEL NAME FRONTENAC

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 27.5

VESSEL SPEED in feet/sec. = 10.74

BOW ON TIME 1r. sec = 62

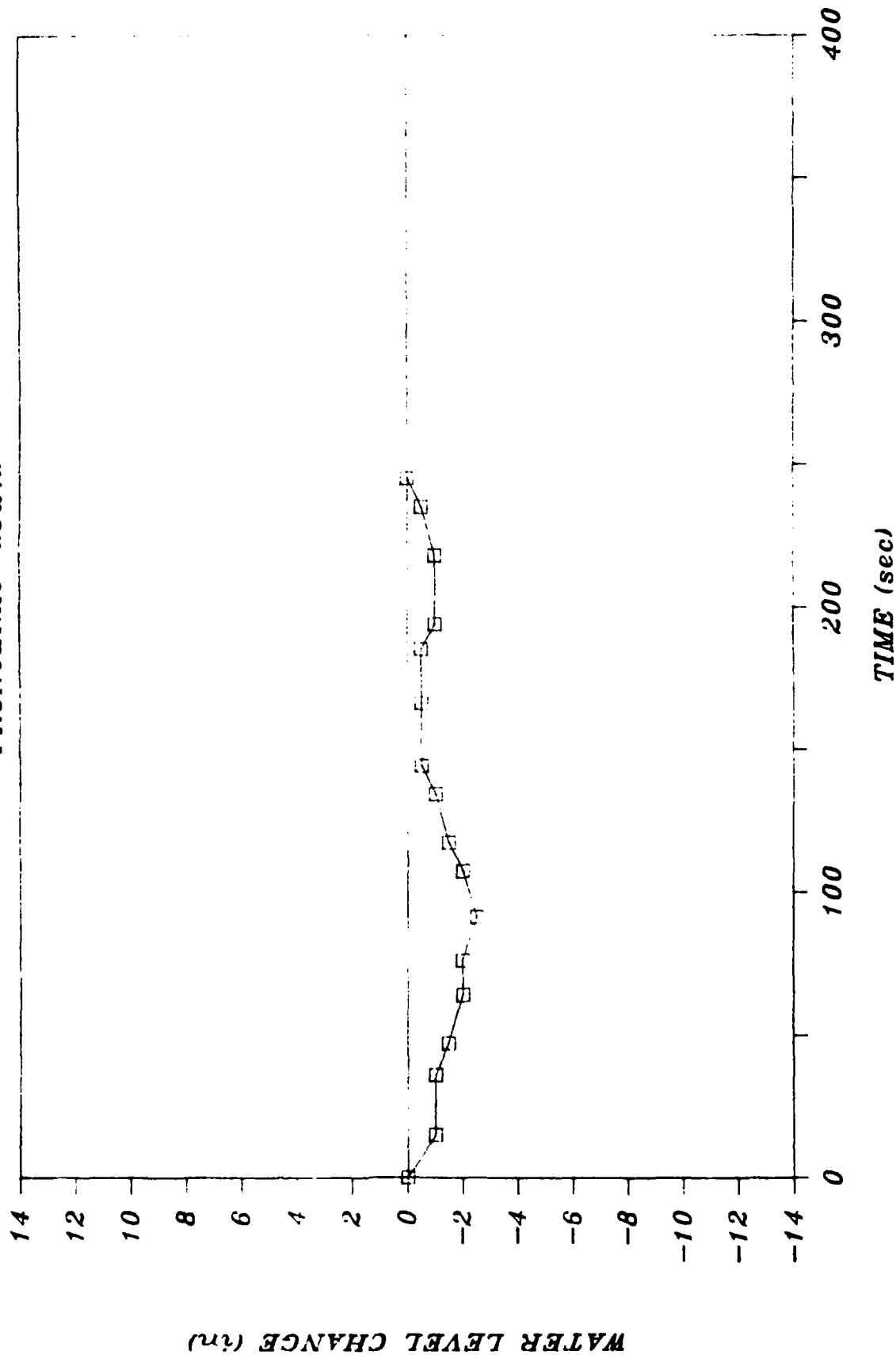
STERN ON TIME 17 SEC = 130

DISTANCE TO STAFF GAUGE from green side in feet = 40

BACKGROUND READING in inches = 23

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	23.0	0.0
2	15.0	22.0	-1.0
3	36.0	22.0	-1.0
4	47.0	21.5	-1.5
5	64.0	21.0	-2.0
6	76.0	21.0	-2.0
7	91.0	20.5	-2.5
8	107.0	21.0	-2.0
9	117.0	21.5	-1.5
10	134.0	22.0	-1.0
11	144.0	22.5	-0.5
12	166.0	22.5	-0.5
13	185.0	22.5	-0.5
14	194.0	22.0	-1.0
15	218.0	22.0	-1.0
16	235.0	22.5	-0.5
17	245.0	23.0	0.0

SAND ISLAND (green)
FRONTENAC (down)



 DRAWDOWN DATA

NAME OF SECTION SAND ISLAND
 #####

DATE OF OBSERVATION 6/25/85

VESSEL NAME FRONTENAC

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 27.5

VESSEL SPEED in feet/sec. = 10.74

BOW ON TIME in sec = 62

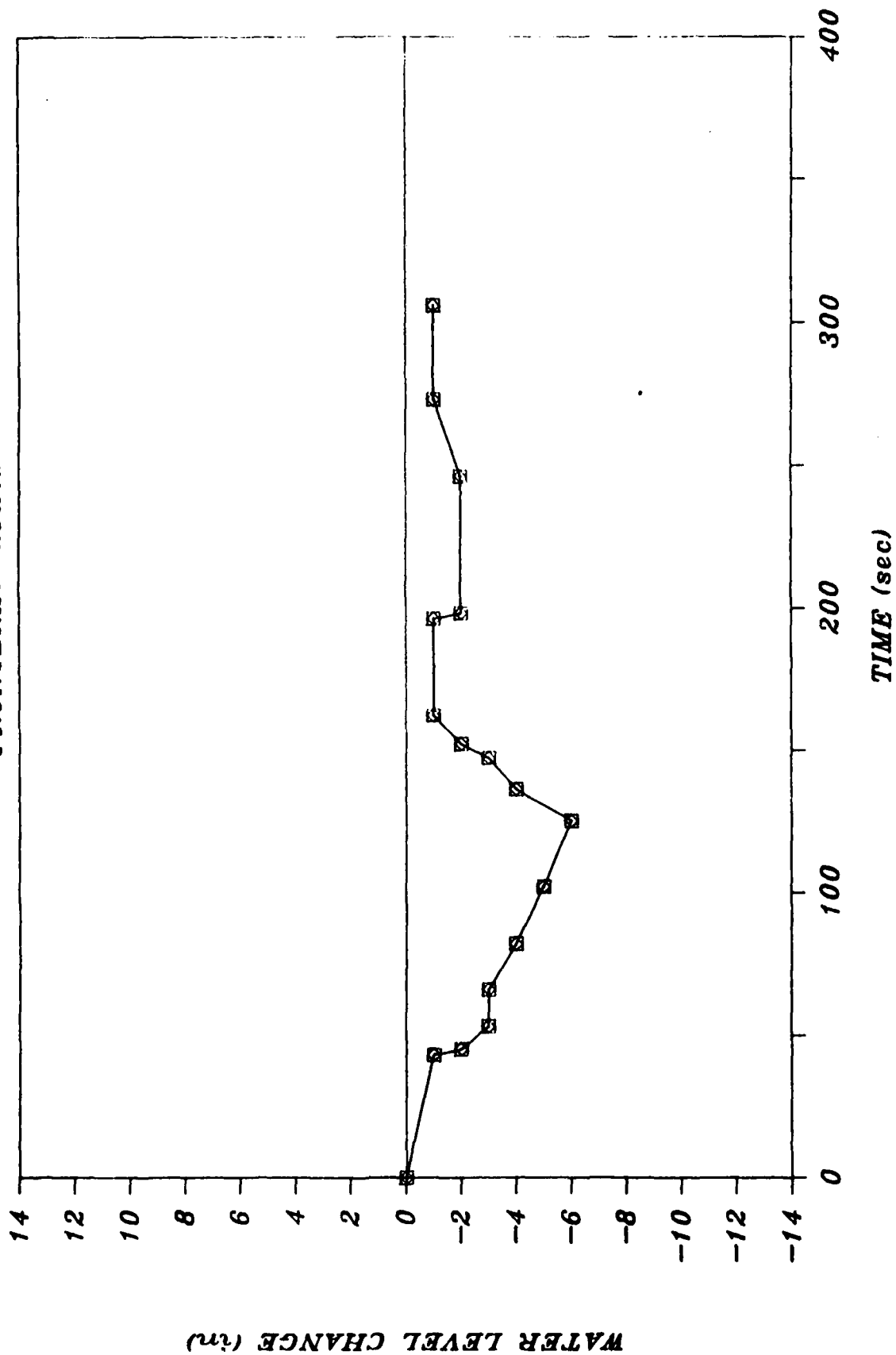
STERN ON TIME in sec = 130

DISTANCE TO STAFF GAUGE from green side in feet = 2790

BACKGROUND READING in inches = 20

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	20.0	0.0
2	43.0	19.0	-1.0
3	45.0	18.0	-2.0
4	53.0	17.0	-3.0
5	66.0	17.0	-3.0
6	82.0	16.0	-4.0
7	102.0	15.0	-5.0
8	125.0	14.0	-6.0
9	136.0	16.0	-4.0
10	147.0	17.0	-3.0
11	152.0	18.0	-2.0
12	162.0	19.0	-1.0
13	196.0	19.0	-1.0
14	198.0	18.0	-2.0
15	246.0	18.0	-2.0
16	273.0	19.0	-1.0
17	306.0	19.0	-1.0

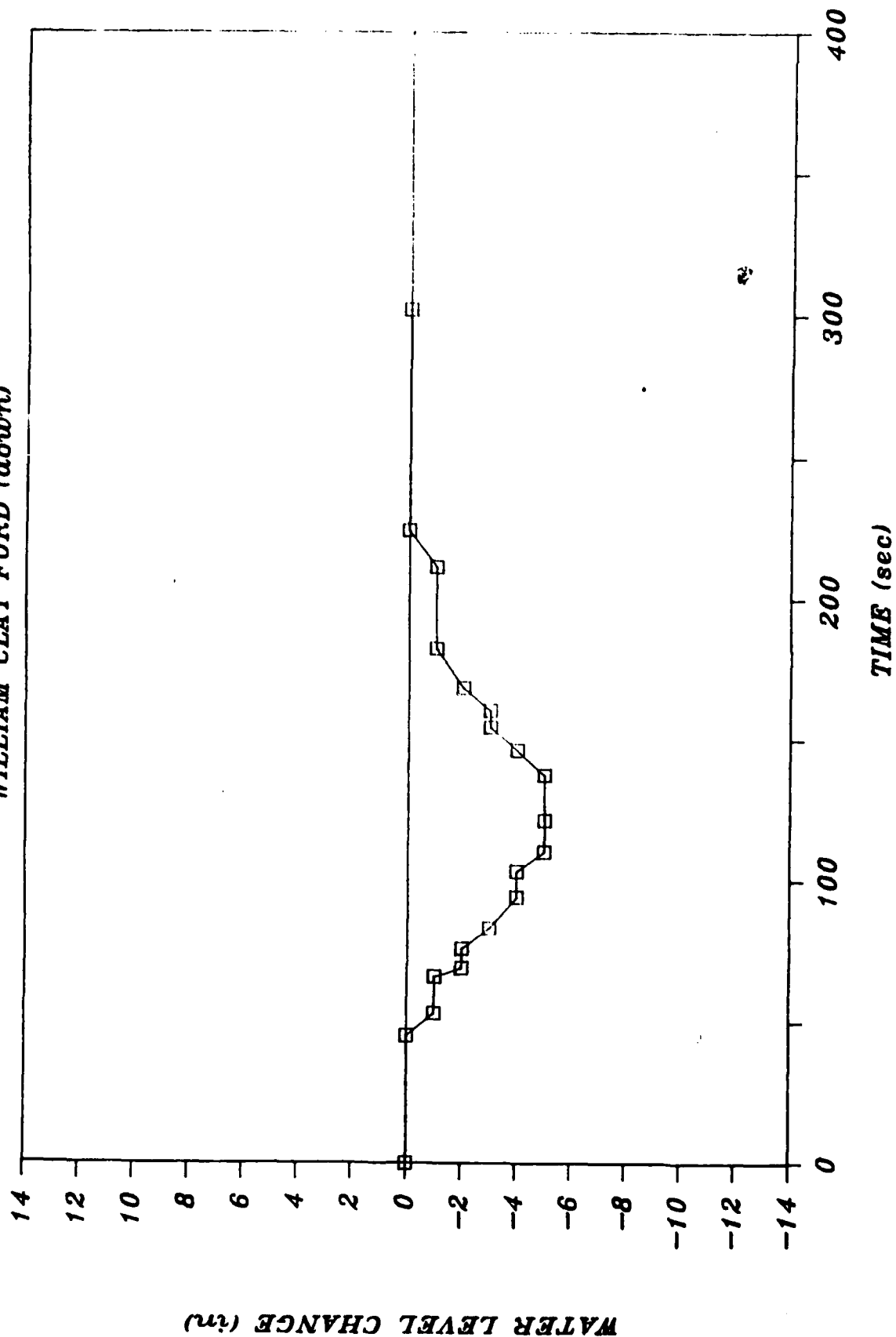
SAND ISLAND (red)
FRONTENAC (down)



[illegible]

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	14.0	0.0
2	45.0	14.0	0.0
3	53.0	13.0	-1.0
4	66.0	13.0	-1.0
5	69.0	12.0	-2.0
6	76.0	12.0	-2.0
7	83.0	11.0	-3.0
8	94.0	10.0	-4.0
9	103.0	10.0	-4.0
10	110.0	9.0	-5.0
11	121.0	9.0	-5.0
12	137.0	9.0	-5.0
13	146.0	10.0	-4.0
14	154.0	11.0	-3.0
15	160.0	11.0	-3.0
16	168.0	12.0	-2.0
17	182.0	13.0	-1.0
18	211.0	13.0	-1.0
19	224.0	14.0	0.0
20	302.0	14.0	0.0

SAND ISLAND (green)
WILLIAM CLAY FORD (down)



 DRAWDOWN DATA

NAME OF SECTION SAND ISLAND
 #####

DATE OF OBSERVATION 6/28/85

VESSEL NAME WILLIAM CLAY FORD

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 767

VESSEL BEAM in feet = 70

VESSEL DRAFT in feet = 27?

VESSEL SPEED in feet/sec. = 10.8

BOW ON TIME in sec = 55

STERN ON TIME in sec = 126

DISTANCE TO STAFF GAUGE from green side in feet = 2790

BACKGROUND READING in inches = 22

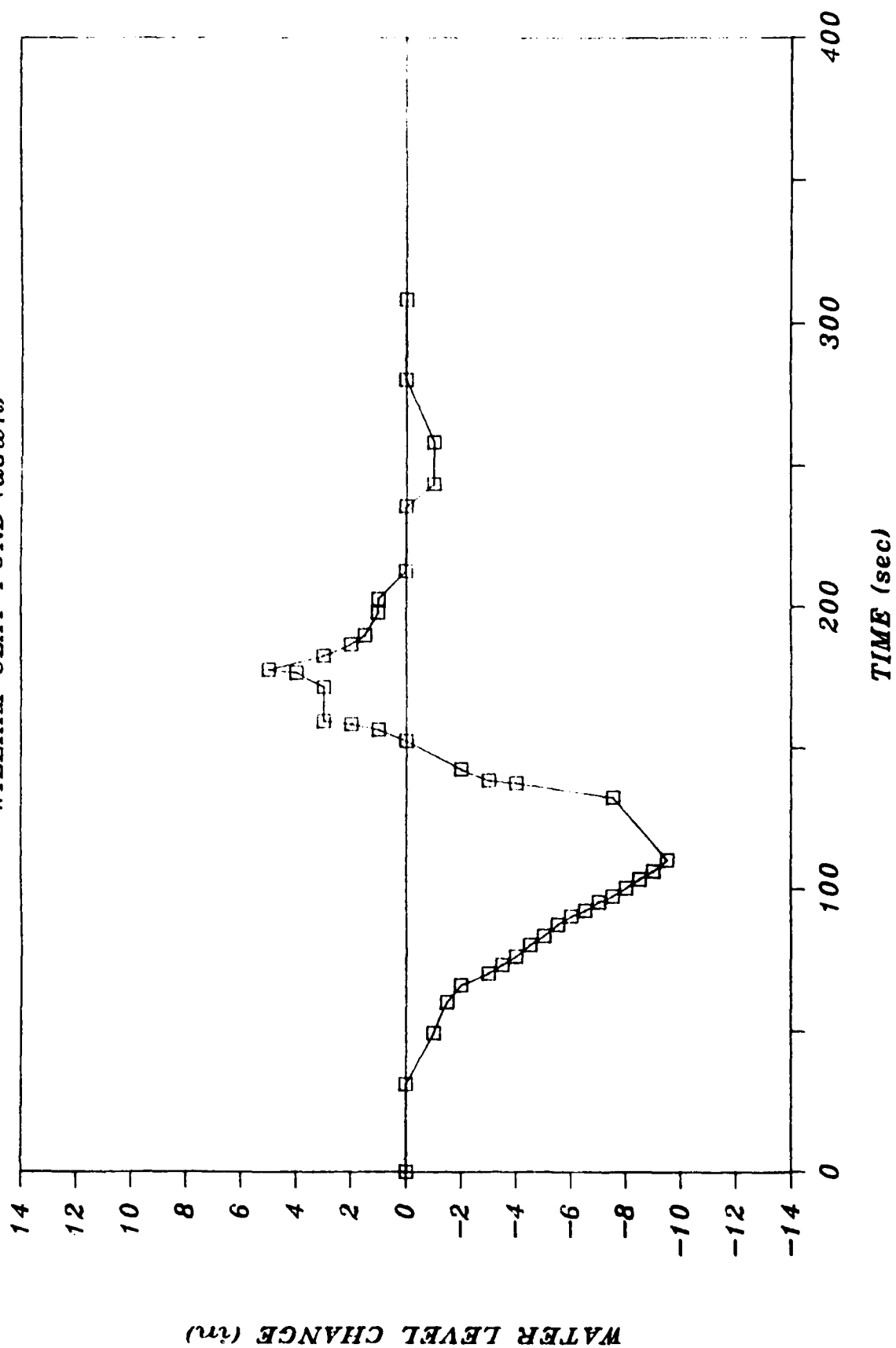
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	22.0	0.0
2	31.0	22.0	0.0
3	49.0	21.0	-1.0
4	60.0	20.5	-1.5
5	66.0	20.0	-2.0
6	70.0	19.0	-3.0
7	73.0	18.5	-3.5
8	76.0	18.0	-4.0
9	80.0	17.5	-4.5
10	83.0	17.0	-5.0
11	87.0	16.5	-5.5
12	90.0	16.0	-6.0
13	92.0	15.5	-6.5
14	95.0	15.0	-7.0
15	97.0	14.5	-7.5
16	100.0	14.0	-8.0
17	103.0	13.5	-8.5
18	106.0	13.0	-9.0
19	110.0	12.5	-9.5
20	132.0	14.5	-7.5

DRAWDOWN DATA (continued)

NAME OF SECTION SAND ISLAND

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	137.0	18.0	-4.0
22	138.0	19.0	-3.0
23	142.0	20.0	-2.0
24	152.0	22.0	0.0
25	156.0	23.0	1.0
26	158.0	24.0	2.0
27	159.0	25.0	3.0
28	171.0	25.0	3.0
29	176.0	26.0	4.0
30	177.0	27.0	5.0
31	182.0	25.0	3.0
32	186.0	24.0	2.0
33	189.0	23.5	1.5
34	197.0	23.0	1.0
35	202.0	23.0	1.0
36	212.0	22.0	0.0
37	235.0	22.0	0.0
38	243.0	21.0	-1.0
39	258.0	21.0	-1.0
40	280.0	22.0	0.0
41	308.0	22.0	0.0

SAND ISLAND (red)
WILLIAM CLAY FORD (down)



 DRAWDOWN DATA

NAME OF SECTION SAND ISLAND
 #####

DATE OF OBSERVATION 6/28/85

VESSEL NAME H.LEE WHITE

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 704

VESSEL BEAM in feet = 78

VESSEL DRAFT in feet = 28

VESSEL SPEED in feet/sec. = 10.67

BOW ON TIME in sec = 61

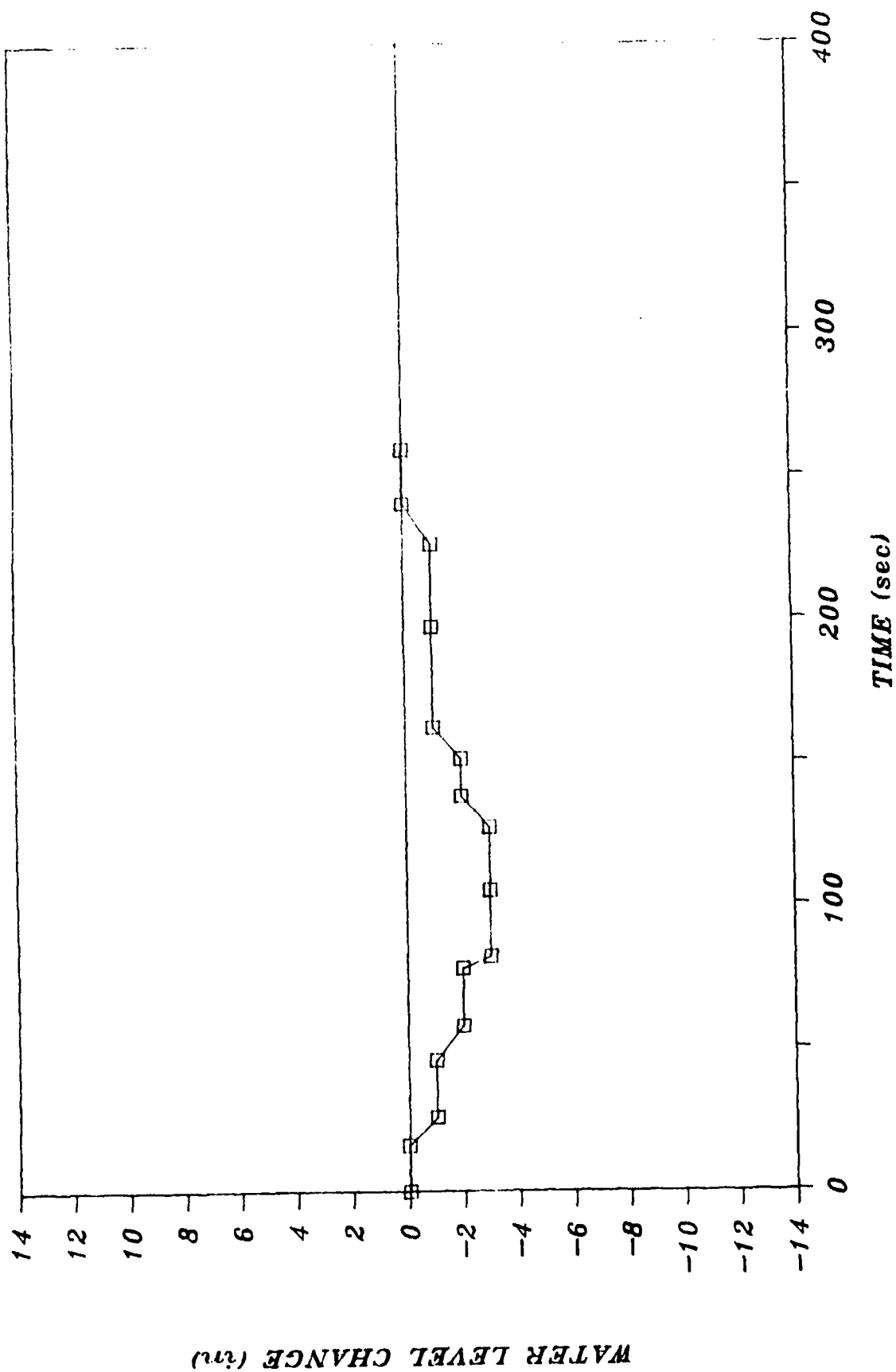
STERN ON TIME in sec = 127

DISTANCE TO STAFF GAUGE from green side in feet = 40

BACKGROUND READING in inches = 15

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	15.0	0.0
2	16.0	15.0	0.0
3	26.0	14.0	-1.0
4	46.0	14.0	-1.0
5	58.0	13.0	-2.0
6	78.0	13.0	-2.0
7	82.0	12.0	-3.0
8	105.0	12.0	-3.0
9	127.0	12.0	-3.0
10	138.0	13.0	-2.0
11	151.0	13.0	-2.0
12	162.0	14.0	-1.0
13	197.0	14.0	-1.0
14	226.0	14.0	-1.0
15	240.0	15.0	0.0
16	259.0	15.0	0.0

SAND ISLAND (green)
H. LEE WHITE (down)



~~~~~  
 DRAWDOWN DATA

NAME OF SECTION      SAND ISLAND  
 ~~~~~

DATE OF OBSERVATION 6/28/85

VESSEL NAME H. LEE WHITE

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 704

VESSEL BEAM in feet = 78

VESSEL DRAFT in feet = 28

VESSEL SPEED in feet/sec. = 10.67

BOW ON TIME in sec = 61

STERN ON TIME in sec = 127

DISTANCE TO STAFF GAUGE from green side in feet = 2790

BACKGROUND READING in inches = 23

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	23.0	0.0
2	3.0	23.0	0.0
3	17.0	22.5	-0.5
4	26.0	22.5	-0.5
5	31.0	22.0	-1.0
6	46.0	22.0	-1.0
7	51.0	21.5	-1.5
8	57.0	21.0	-2.0
9	65.0	20.5	-2.5
10	70.0	20.0	-3.0
11	77.0	19.5	-3.5
12	82.0	19.0	-4.0
13	88.0	18.0	-5.0
14	93.0	17.5	-5.5
15	99.0	17.0	-6.0
16	111.0	17.0	-6.0
17	120.0	17.5	-5.5
18	124.0	18.0	-5.0
19	131.0	18.5	-4.5
20	136.0	19.5	-3.5

#####

DRAWDOWN DATA (continued)

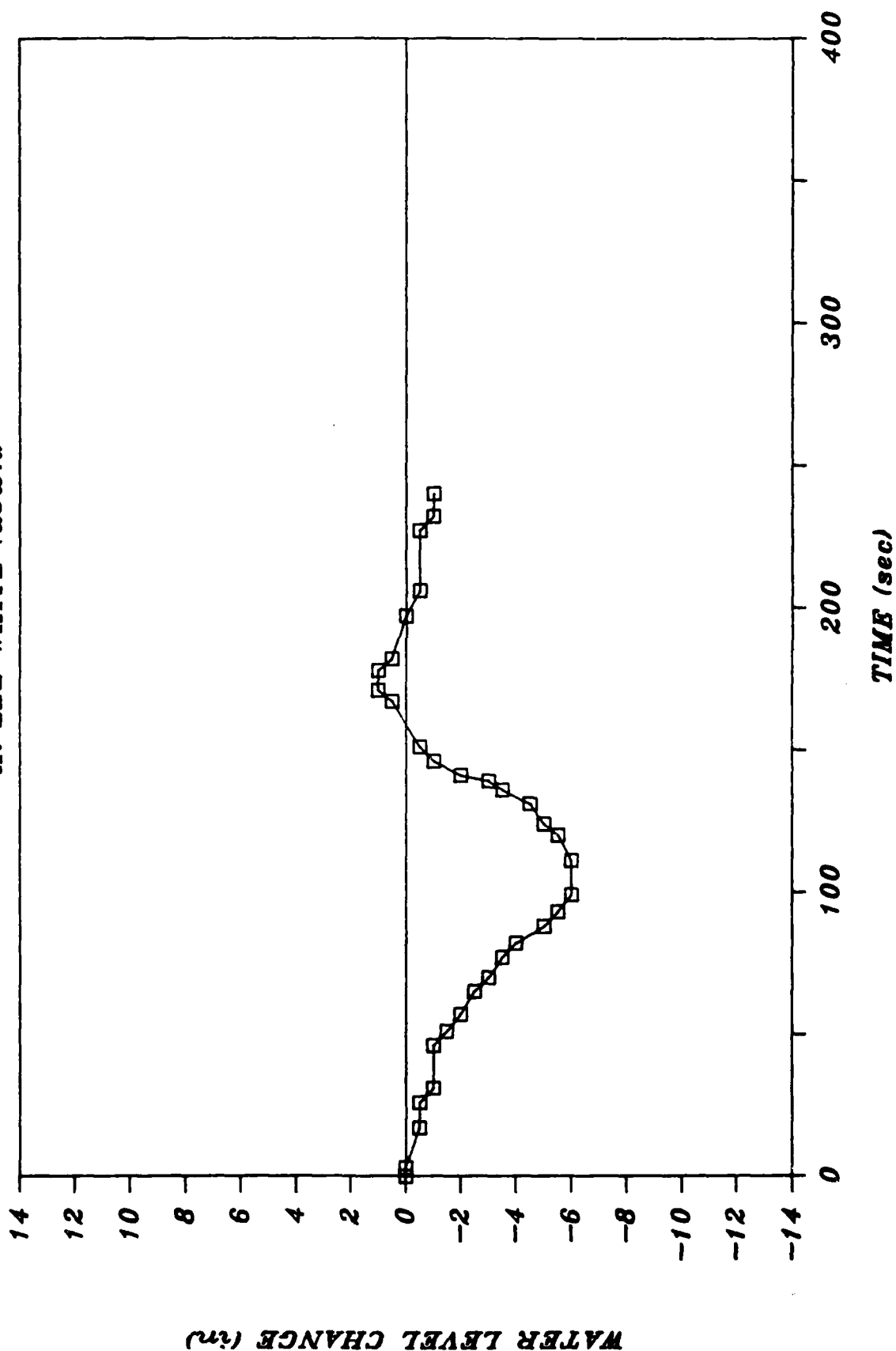
NAME OF SECTION SAND ISLAND

#####

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	139.0	20.0	-3.0
22	141.0	21.0	-2.0
23	146.0	22.0	-1.0
24	151.0	22.5	-0.5
25	167.0	23.5	0.5
26	171.0	24.0	1.0
27	178.0	24.0	1.0
28	182.0	23.5	0.5
29	197.0	23.0	0.0
30	206.0	22.5	-0.5
31	227.0	22.5	-0.5
32	232.0	22.0	-1.0
33	240.0	22.0	-1.0

SAND ISLAND (red)

H. LEE WHITE (down)

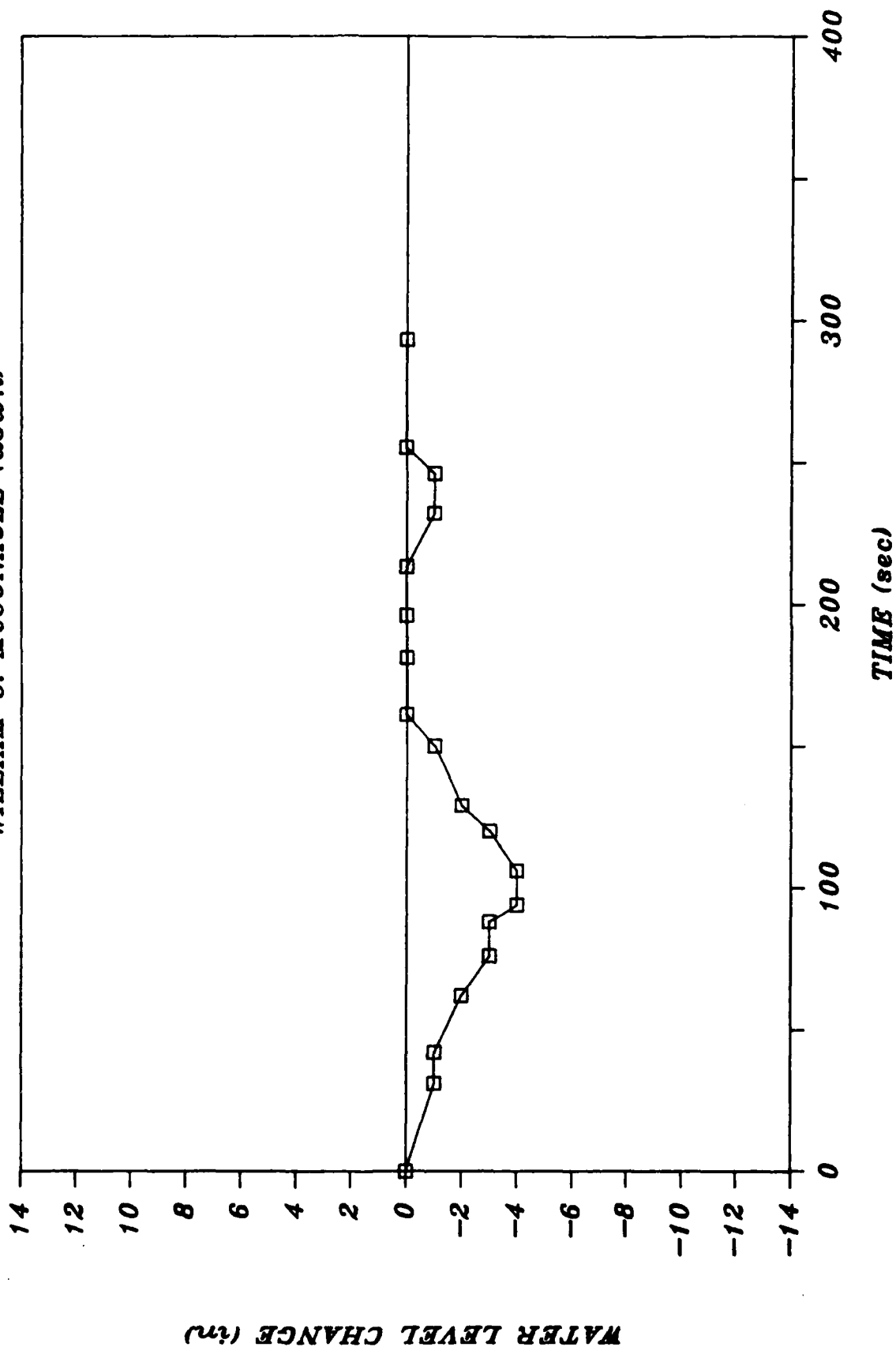


NAME OF SECTION SAND ISLAND

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	14.0	0.0
2	31.0	13.0	-1.0
3	42.0	13.0	-1.0
4	62.0	12.0	-2.0
5	76.0	11.0	-3.0
6	88.0	11.0	-3.0
7	94.0	10.0	-4.0
8	106.0	10.0	-4.0
9	120.0	11.0	-3.0
10	129.0	12.0	-2.0
11	150.0	13.0	-1.0
12	161.0	14.0	0.0
13	181.0	14.0	0.0
14	196.0	14.0	0.0
15	213.0	14.0	0.0
16	232.0	13.0	-1.0
17	246.0	13.0	-1.0
18	255.0	14.0	0.0
19	293.0	14.0	0.0

SAND ISLAND (green)

WILLIAM C. McCONAGLE (down)



 DRAWDOWN DATA

NAME OF SECTION SAND ISLAND
 #####

DATE OF OBSERVATION 6/28/85

VESSEL NAME WILLIAM A. MCGONAGLE

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 600

VESSEL BEAM in feet = 60

VESSEL DRAFT in feet = 22

VESSEL SPEED in feet/sec. = 12.76

BOW ON TIME in sec = 40

STERN ON TIME in sec = 87?

DISTANCE TO STAFF GAUGE from green side in feet = 2790

BACKGROUND READING in inches = 22

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	22.0	0.0
2	32.0	22.0	0.0
3	44.0	20.5	-1.5
4	47.0	20.0	-2.0
5	54.0	19.0	-3.0
6	57.0	18.5	-3.5
7	61.0	18.0	-4.0
8	66.0	17.0	-5.0
9	73.0	16.0	-6.0
10	77.0	15.5	-6.5
11	80.0	15.0	-7.0
12	84.0	15.0	-7.0
13	102.0	16.0	-6.0
14	107.0	17.0	-5.0
15	108.0	18.0	-4.0
16	110.0	18.5	-3.5
17	112.0	19.0	-3.0
18	116.0	20.0	-2.0
19	122.0	23.0	1.0
20	125.0	23.5	1.5

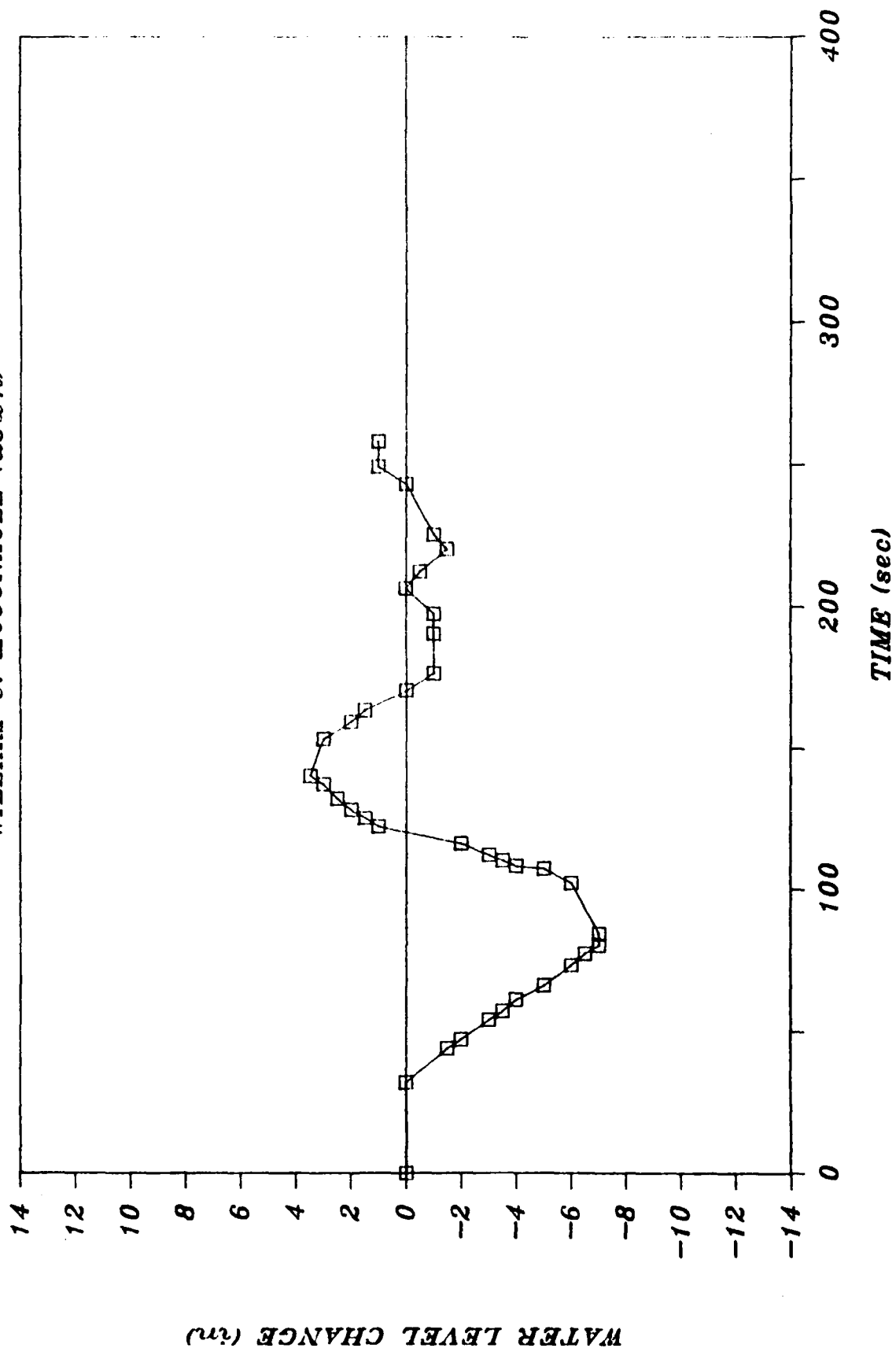
DRAWDOWN DATA (continued)

NAME OF SECTION	SAND ISLAND
<div style="background-color: black; height: 1em;"></div>	

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	128.0	24.0	2.0
22	132.0	24.5	2.5
23	137.0	25.0	3.0
24	140.0	25.5	3.5
25	153.0	25.0	3.0
26	159.0	24.0	2.0
27	163.0	23.5	1.5
28	170.0	22.0	0.0
29	176.0	21.0	-1.0
30	190.0	21.0	-1.0
31	197.0	21.0	-1.0
32	206.0	22.0	0.0
33	212.0	21.5	-0.5
34	220.0	20.5	-1.5
35	225.0	21.0	-1.0
36	243.0	22.0	0.0
37	249.0	23.0	1.0
38	258.0	23.0	1.0

SAND ISLAND (red)

WILLIAM C. McCONAGLE (down)



NAME OF SECTION SAND ISLAND

DATE OF OBSERVATION 6/28/85

VESSEL NAME JAMES R. BARKER

DIRECTION	DOWNBOUND
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

VESSEL LENGTH in feet = 1000

VESSEL BEAM in feet = 105

VESSEL DRAFT in feet = 27

VESSEL SPEED in feet/sec. = 10.87

BOW ON TIME in sec = 56

STERN ON TIME in sec = 148

DISTANCE TO STAFF GAUGE from green side in feet = 40

BACKGROUND READING in inches = 14

BB121

oo

DRAWDOWN DATA (continued)

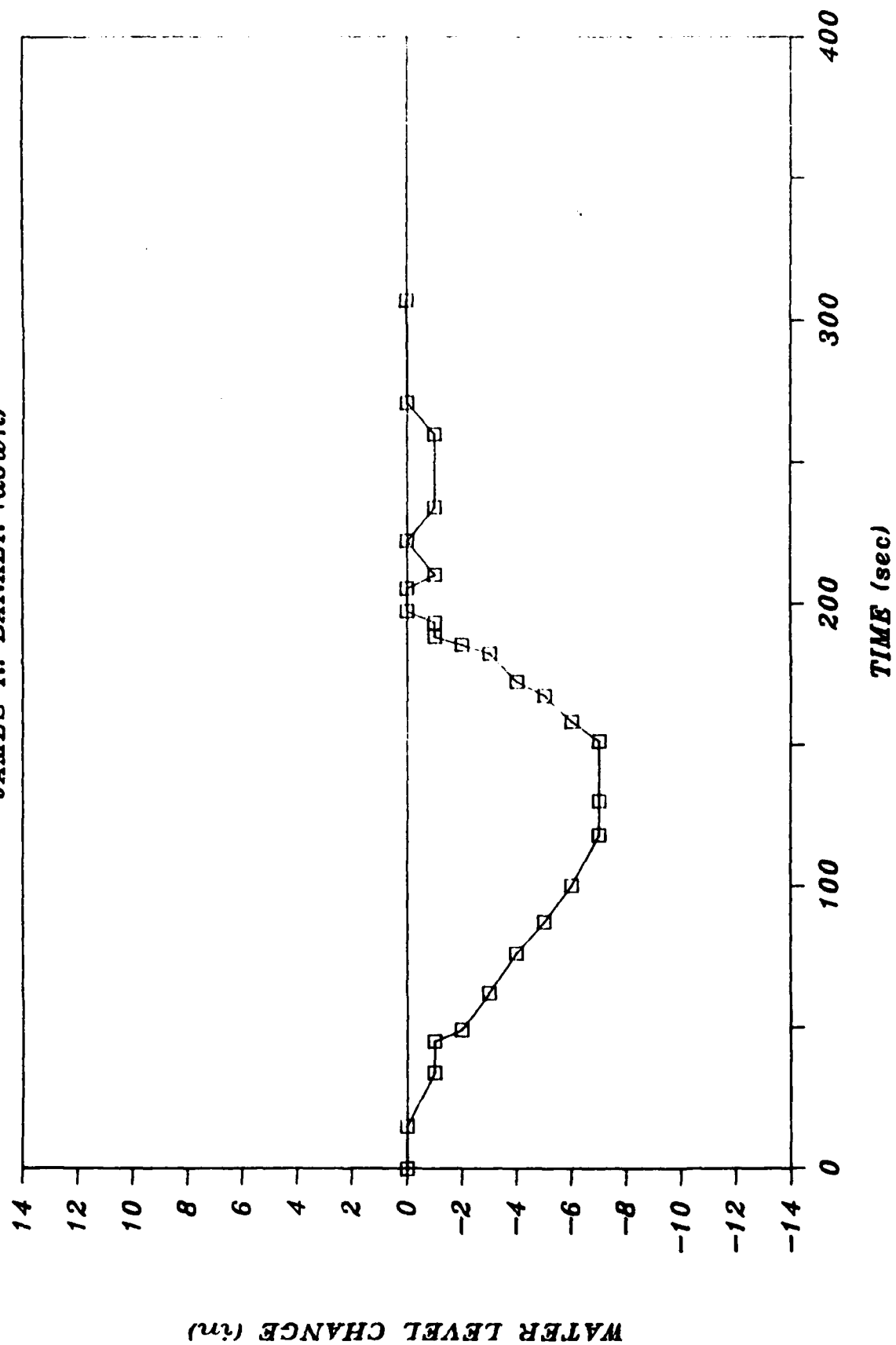
NAME OF SECTION SAND ISLAND

oo

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	205.0	14.0	0.0
22	210.0	13.0	-1.0
23	222.0	14.0	0.0
24	234.0	13.0	-1.0
25	260.0	13.0	-1.0
26	271.0	14.0	0.0
27	307.0	14.0	0.0

SAND ISLAND (green)

JAMES R. BARKER (down)



DRAWDOWN DATA

NAME OF SECTION SAND ISLAND
#####

DATE OF OBSERVATION 6/28/85

VESSEL NAME JAMES R. BARKER

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 1000

VESSEL BEAM in feet = 105

VESSEL DRAFT in feet = 27

VESSEL SPEED in feet/sec. = 10.87

BOW ON TIME in sec = 56

STERN ON TIME in sec = 148

DISTANCE TO STAFF GAUGE from green side in feet = 2790

BACKGROUND READING in inches = 22

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	22.0	0.0
2	26.0	21.5	-0.5
3	32.0	21.0	-1.0
4	48.0	20.5	-1.5
5	60.0	19.5	-2.5
6	64.0	19.0	-3.0
7	70.0	18.0	-4.0
8	74.0	17.5	-4.5
9	78.0	17.0	-5.0
10	82.0	16.5	-5.5
11	85.0	16.0	-6.0
12	88.0	15.0	-7.0
13	92.0	14.5	-7.5
14	97.0	14.0	-8.0
15	105.0	13.0	-9.0
16	112.0	12.5	-9.5
17	118.0	12.0	-10.0
18	123.0	11.5	-10.5
19	127.0	11.0	-11.0
20	135.0	11.0	-11.0

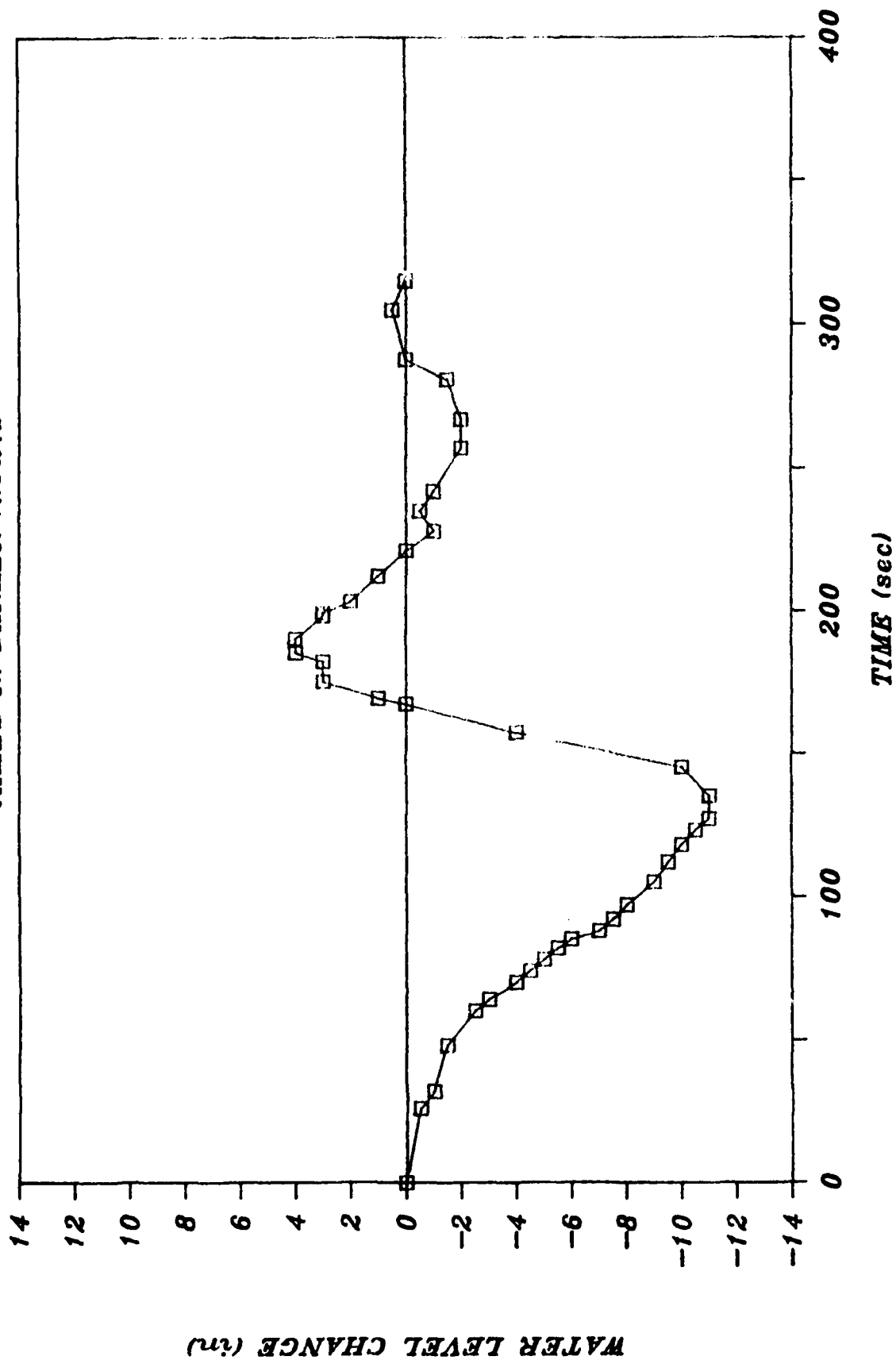
DRAWDOWN DATA (continued)

NAME OF SECTION SAND ISLAND

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	145.0	12.0	-10.0
22	157.0	18.0	-4.0
23	167.0	22.0	0.0
24	169.0	23.0	1.0
25	175.0	25.0	3.0
26	182.0	25.0	3.0
27	185.0	26.0	4.0
28	190.0	26.0	4.0
29	198.0	25.0	3.0
30	199.0	25.0	3.0
31	203.0	24.0	2.0
32	212.0	23.0	1.0
33	221.0	22.0	0.0
34	228.0	21.0	-1.0
35	235.0	21.5	-0.5
36	242.0	21.0	-1.0
37	257.0	20.0	-2.0
38	267.0	20.0	-2.0
39	281.0	20.5	-1.5
40	288.0	22.0	0.0
41	305.0	22.5	0.5
42	315.0	22.0	0.0

SAND ISLAND (red)

JAMES R. BARKER (down)



ISLAND VIEW

@@
 DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW
 @@

DATE OF OBSERVATION 11/15/84

VESSEL NAME SELKIRK SETTLER

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75.8

VESSEL DRAFT in feet = 27

VESSEL SPEED in feet/sec. = 14.0

BOW ON TIME in sec = 55

STERN ON TIME in sec = 107

DISTANCE TO STAFF GAUGE from green side in feet = 98

BACKGROUND READING in inches = 19

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	19.0	0.0
2	10.0	18.0	-1.0
3	19.0	18.0	-1.0
4	22.0	17.5	-1.5
5	26.0	18.0	-1.0
6	42.0	18.0	-1.0
7	48.0	17.5	-1.5
8	58.0	17.5	-1.5
9	62.0	17.0	-2.0
10	64.0	17.5	-1.5
11	72.0	17.0	-2.0
12	74.0	16.5	-2.5
13	76.0	17.0	-2.0
14	82.0	17.0	-2.0
15	85.0	16.5	-2.5
16	87.0	16.5	-2.5
17	91.0	17.0	-2.0
18	93.0	18.0	-1.0
19	96.0	17.0	-2.0
20	99.0	17.0	-2.0

DRAWDOWN DATA (continued)

NAME OF SECTION ISLAND VIEW

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	102.0	17.5	-1.5
22	105.0	17.0	-2.0
23	108.0	17.0	-2.0
24	110.0	17.5	-1.5
25	115.0	18.0	-1.0
26	120.0	17.0	-2.0
27	122.0	16.0	-3.0
28	124.0	15.5	-3.5
29	127.0	15.5	-3.5
30	130.0	15.0	-4.0
31	131.0	15.5	-3.5
32	132.0	16.0	-3.0
33	134.0	17.0	-2.0
34	137.0	16.0	-3.0
35	142.0	16.0	-3.0
36	144.0	16.5	-2.5
37	148.0	16.0	-3.0
38	151.0	16.0	-3.0
39	153.0	16.5	-2.5
40	156.0	16.5	-2.5
41	158.0	17.0	-2.0
42	160.0	17.5	-1.5
43	161.0	18.0	-1.0
44	164.0	18.5	-0.5
45	165.0	18.0	-1.0
46	167.0	18.0	-1.0
47	168.0	19.0	0.0
48	183.0	19.0	0.0
49	185.0	18.0	-1.0
50	193.0	18.0	-1.0
51	195.0	17.5	-1.5
52	201.0	17.5	-1.5
53	204.0	17.0	-2.0
54	206.0	17.0	-2.0
55	209.0	16.5	-2.5
56	212.0	16.5	-2.5
57	214.0	17.0	-2.0
58	216.0	17.5	-1.5
59	219.0	17.5	-1.5
60	221.0	18.0	-1.0
61	226.0	18.0	-1.0
62	227.0	18.5	-0.5
63	230.0	18.5	-0.5
64	234.0	19.0	0.0

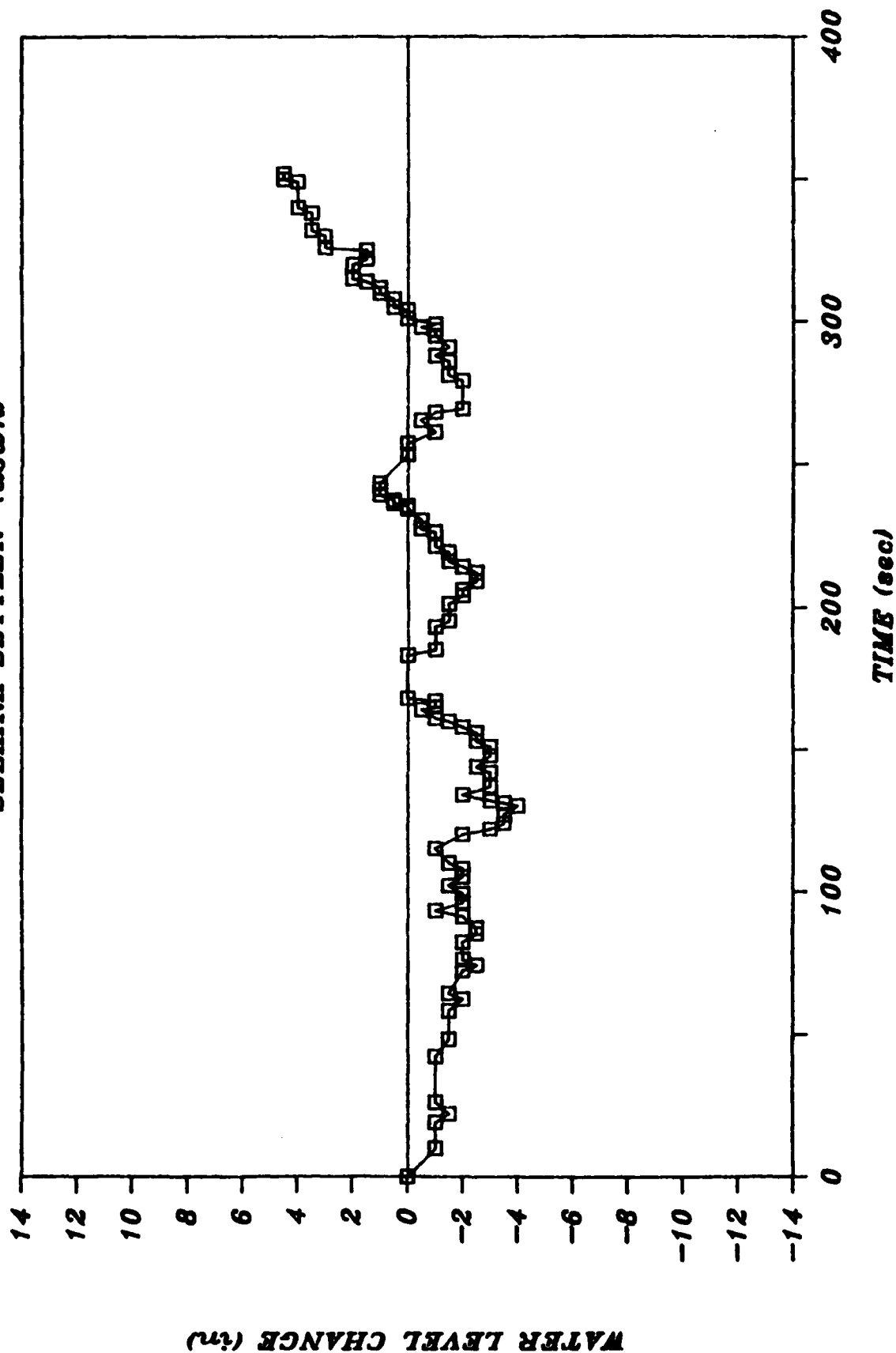
DRAWDOWN DATA (continued)

NAME OF SECTION ISLAND VIEW

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
65	235.0	19.0	0.0
66	236.0	19.5	0.5
67	237.0	19.5	0.5
68	239.0	20.0	1.0
69	243.0	20.0	1.0
70	253.0	19.0	0.0
71	257.0	19.0	0.0
72	261.0	18.0	-1.0
73	265.0	18.5	-0.5
74	268.0	18.0	-1.0
75	269.0	17.0	-2.0
76	279.0	17.0	-2.0
77	281.0	17.5	-1.5
78	286.0	17.5	-1.5
79	288.0	18.0	-1.0
80	291.0	17.5	-1.5
81	295.0	18.0	-1.0
82	297.0	18.0	-1.0
83	298.0	18.5	-0.5
84	299.0	18.0	-1.0
85	301.0	19.0	0.0
86	304.0	19.0	0.0
87	305.0	19.5	0.5
88	308.0	19.5	0.5
89	310.0	20.0	1.0
90	312.0	20.0	1.0
91	314.0	20.5	1.5
92	315.0	21.0	2.0
93	320.0	21.0	2.0
94	322.0	20.5	1.5
95	325.0	20.5	1.5
96	326.0	22.0	3.0
97	330.0	22.0	3.0
98	332.0	22.5	3.5
99	338.0	22.5	3.5
100	340.0	23.0	4.0
101	349.0	23.0	4.0
102	350.0	23.5	4.5
103	352.0	23.5	4.5

ISLAND VIEW 11/15/84

SELKIRK SETTLER (down)



oo

DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW

oo

DATE OF OBSERVATION 11/15/84

VESSEL NAME SELKIRK SETTLER

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75.8

VESSEL DRAFT in feet = 27

VESSEL SPEED in feet/sec. = 14.0

BOW ON TIME in sec = 55

STERN ON TIME in sec = 107

DISTANCE TO STAFF GAUGE from green side in feet = 1990

BACKGROUND READING in inches = 21

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	21.0	0.0
2	40.0	21.0	0.0
3	46.0	20.4	-0.6
4	48.0	19.2	-1.8
5	50.0	18.0	-3.0
6	54.0	19.2	-1.8
7	57.0	18.0	-3.0
8	59.0	16.8	-4.2
9	61.0	15.6	-5.4
10	65.0	15.6	-5.4
11	67.0	15.0	-6.0
12	73.0	15.0	-6.0
13	75.0	14.4	-6.6
14	78.0	14.4	-6.6
15	81.0	13.2	-7.8
16	83.0	12.0	-9.0
17	85.0	12.0	-9.0
18	87.0	14.4	-6.6
19	89.0	13.2	-7.8
20	91.0	12.0	-9.0

DRAWDOWN DATA (continued)

NAME OF SECTION ISLAND VIEW

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	93.0	12.0	-9.0
22	95.0	10.8	-10.2
23	97.0	10.8	-10.2
24	98.0	12.0	-9.0
25	102.0	12.0	-9.0
26	105.0	15.0	-6.0
27	106.0	14.4	-6.6
28	109.0	13.2	-7.8
29	115.0	15.0	-6.0
30	121.0	16.8	-4.2
31	124.0	15.6	-5.4
32	127.0	16.8	-4.2
33	129.0	15.6	-5.4
34	132.0	16.8	-4.2
35	142.0	16.8	-4.2
36	144.0	15.6	-5.4
37	149.0	16.8	-4.2
38	153.0	18.0	-3.0
39	158.0	18.0	-3.0
40	160.0	19.2	-1.8
41	161.0	19.2	-1.8
42	162.0	20.4	-0.6
43	164.0	20.4	-0.6
44	165.0	21.6	0.6
45	167.0	21.6	0.6
46	168.0	22.8	1.8
47	172.0	22.8	1.8
48	174.0	24.0	3.0
49	178.0	22.8	1.8
50	181.0	22.8	1.8
51	183.0	21.6	0.6
52	185.0	21.0	0.0
53	186.0	21.0	0.0
54	188.0	21.6	0.6
55	194.0	21.0	0.0
56	197.0	20.4	-0.6
57	203.0	20.4	-0.6
58	207.0	19.2	-1.8
59	214.0	19.2	-1.8
60	216.0	18.0	-3.0
61	217.0	18.0	-3.0
62	220.0	16.8	-4.2
63	225.0	18.0	-3.0
64	228.0	16.8	-4.2

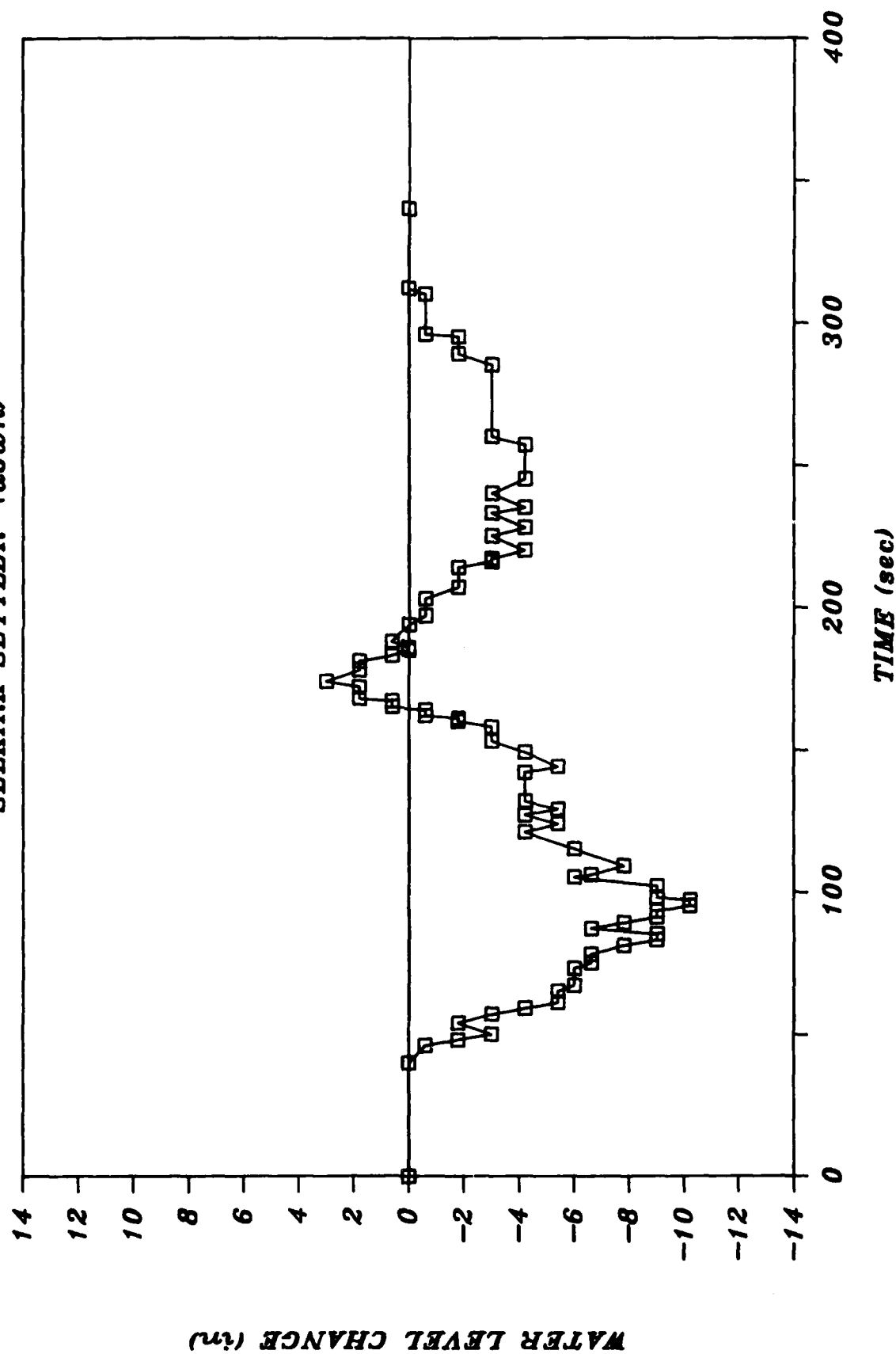
DRAWDOWN DATA (continued)

NAME OF SECTION ISLAND VIEW

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
65	233.0	18.0	-3.0
66	235.0	16.8	-4.2
67	240.0	18.0	-3.0
68	245.0	16.8	-4.2
69	257.0	16.8	-4.2
70	260.0	18.0	-3.0
71	285.0	18.0	-3.0
72	289.0	19.2	-1.8
73	295.0	19.2	-1.8
74	296.0	20.4	-0.6
75	310.0	20.4	-0.6
76	312.0	21.0	0.0
77	340.0	21.0	0.0

ISLAND VIEW 11/15/84

SELKIRK SETTLER (down)



 DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW
 #####

DATE OF OBSERVATION 11/15/84
 VESSEL NAME SELKIRK SETTLER
 DIRECTION DOWNBOUND
 VESSEL LENGTH in feet = 730
 VESSEL BEAM in feet = 75.8
 VESSEL DRAFT in feet = 27
 VESSEL SPEED in feet/sec. = 14.0
 BOW ON TIME in sec = 55
 STERN ON TIME in sec = 107
 DISTANCE TO STAFF GAUGE from green side in feet = 2211
 BACKGROUND READING in inches = 14

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	14.0	0.0
2	9.0	14.0	0.0
3	17.0	13.0	-1.0
4	26.0	13.0	-1.0
5	32.0	13.0	-1.0
6	42.0	12.0	-2.0
7	46.0	12.0	-2.0
8	51.0	11.0	-3.0
9	58.0	11.0	-3.0
10	59.0	10.0	-4.0
11	62.0	10.0	-4.0
12	64.0	9.0	-5.0
13	66.0	9.0	-5.0
14	67.0	8.0	-6.0
15	68.0	8.0	-6.0
16	71.0	8.0	-6.0
17	73.0	8.0	-6.0
18	74.0	7.5	-6.5
19	76.0	7.0	-7.0
20	78.0	7.0	-7.0

DRAWDOWN DATA (continued)

NAME OF SECTION ISLAND VIEW

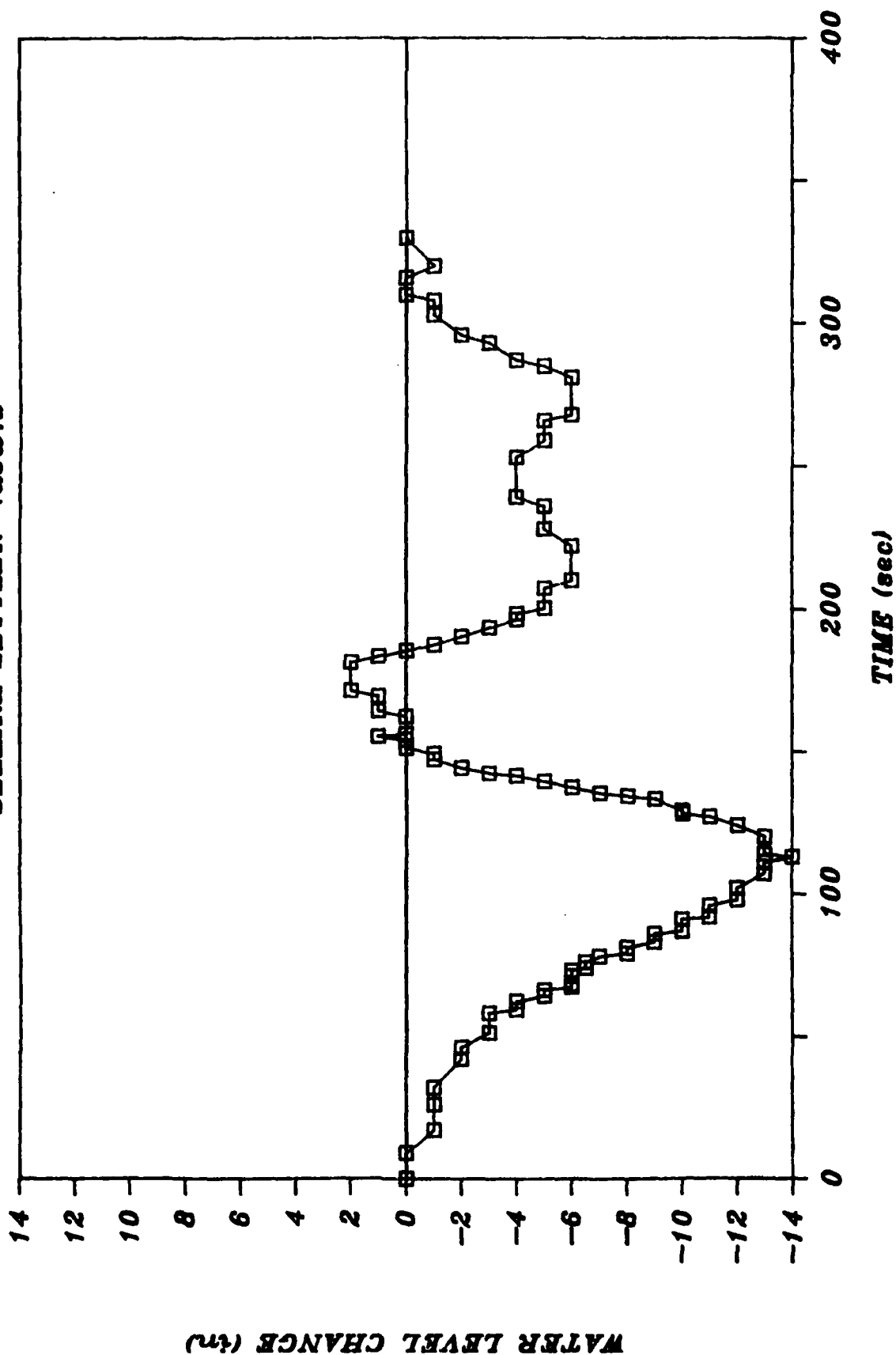
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	79.0	6.0	-8.0
22	81.0	6.0	-8.0
23	83.0	5.0	-9.0
24	86.0	5.0	-9.0
25	87.0	4.0	-10.0
26	91.0	4.0	-10.0
27	92.0	3.0	-11.0
28	96.0	3.0	-11.0
29	98.0	2.0	-12.0
30	102.0	2.0	-12.0
31	107.0	1.0	-13.0
32	111.0	1.0	-13.0
33	113.0	0.0	-14.0
34	114.0	1.0	-13.0
35	120.0	1.0	-13.0
36	124.0	2.0	-12.0
37	127.0	3.0	-11.0
38	128.0	4.0	-10.0
39	129.0	4.0	-10.0
40	133.0	5.0	-9.0
41	134.0	6.0	-8.0
42	135.0	7.0	-7.0
43	137.0	8.0	-6.0
44	139.0	9.0	-5.0
45	141.0	10.0	-4.0
46	142.0	11.0	-3.0
47	144.0	12.0	-2.0
48	147.0	13.0	-1.0
49	149.0	13.0	-1.0
50	151.0	14.0	0.0
51	154.0	14.0	0.0
52	155.0	15.0	1.0
53	156.0	14.0	0.0
54	162.0	14.0	0.0
55	164.0	15.0	1.0
56	169.0	15.0	1.0
57	171.0	16.0	2.0
58	181.0	16.0	2.0
59	183.0	15.0	1.0
60	185.0	14.0	0.0
61	187.0	13.0	-1.0
62	190.0	12.0	-2.0
63	193.0	11.0	-3.0
64	196.0	10.0	-4.0

NAME OF SECTION	ISLAND VIEW
<div style="background-color: black; height: 10px;"></div>	

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
65	198.0	10.0	-4.0
66	200.0	9.0	-5.0
67	207.0	9.0	-5.0
68	210.0	8.0	-6.0
69	222.0	8.0	-6.0
70	228.0	9.0	-5.0
71	236.0	9.0	-5.0
72	239.0	10.0	-4.0
73	253.0	10.0	-4.0
74	259.0	9.0	-5.0
75	266.0	9.0	-5.0
76	268.0	8.0	-6.0
77	281.0	8.0	-6.0
78	285.0	9.0	-5.0
79	287.0	10.0	-4.0
80	293.0	11.0	-3.0
81	296.0	12.0	-2.0
82	303.0	13.0	-1.0
83	308.0	13.0	-1.0
84	310.0	14.0	0.0
85	316.0	14.0	0.0
86	320.0	13.0	-1.0
87	330.0	14.0	0.0

ISLAND VIEW 11/15/84

SELKIRK SETTLER (down)



 DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW
 #####

DATE OF OBSERVATION 11/15/84

VESSEL NAME ONTADOC

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 355

VESSEL BEAM in feet = 49

VESSEL DRAFT in feet = 24.5

VESSEL SPEED in feet/sec. = 15.4

BOW ON TIME in sec = 54

STERN ON TIME in sec = 77

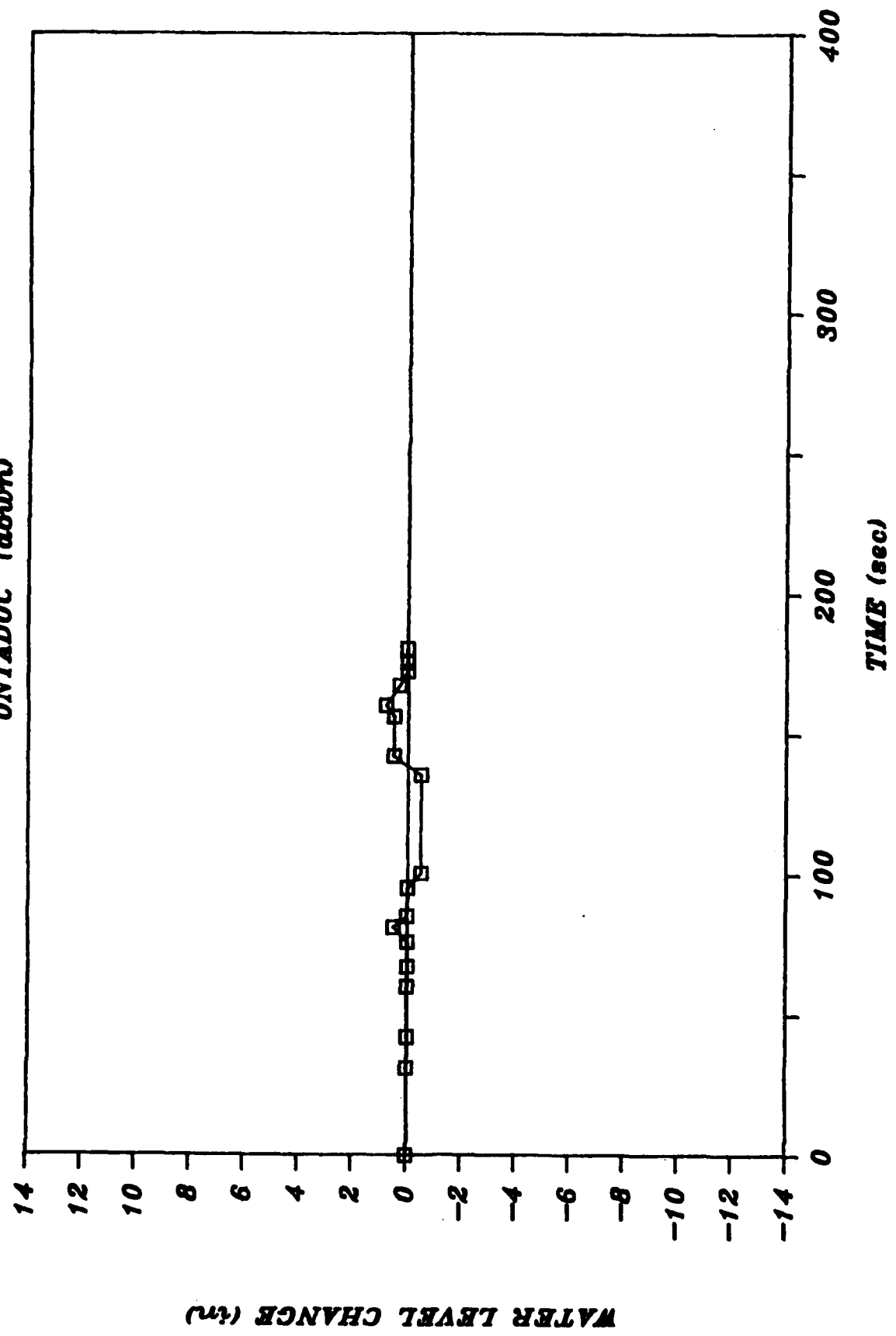
DISTANCE TO STAFF GAUGE from green side in feet = 113

BACKGROUND READING in inches = 21

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	21.0	0.0
2	31.0	21.0	0.0
3	42.0	21.0	0.0
4	60.0	21.0	0.0
5	67.0	21.0	0.0
6	76.0	21.0	0.0
7	81.0	21.5	0.5
8	85.0	21.0	0.0
9	95.0	21.0	0.0
10	100.0	20.5	-0.5
11	135.0	20.5	-0.5
12	142.0	21.5	0.5
13	156.0	21.5	0.5
14	160.0	21.8	0.8
15	167.0	21.3	0.3
16	172.0	21.0	0.0
17	175.0	21.0	0.0
18	180.0	21.0	0.0

ISLAND VIEW 11/15/84

ONTADOC (down)



~~~~~  
 DRAWDOWN DATA

NAME OF SECTION      ISLAND VIEW  
 ~~~~~

DATE OF OBSERVATION 11/15/84
 VESSEL NAME ONTADOC
 DIRECTION DOWNBOUND
 VESSEL LENGTH in feet = 355
 VESSEL BEAM in feet = 49
 VESSEL DRAFT in feet = 24.5
 VESSEL SPEED in feet/sec. = 15.4
 BOW ON TIME in sec = 54
 STERN ON TIME in sec = 77
 DISTANCE TO STAFF GAUGE from green side in feet = 1967
 BACKGROUND READING in inches = 21

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	21.0	0.0
2	36.0	21.0	0.0
3	44.0	20.4	-0.6
4	48.0	19.2	-1.8
5	55.0	19.2	-1.8
6	60.0	18.0	-3.0
7	71.0	16.8	-4.2
8	82.0	16.8	-4.2
9	87.0	18.0	-3.0
10	96.0	18.0	-3.0
11	101.0	19.2	-1.8
12	119.0	19.2	-1.8
13	124.0	19.8	-1.2
14	129.0	19.8	-1.2
15	134.0	20.4	-0.6
16	140.0	20.4	-0.6
17	146.0	21.0	0.0
18	151.0	21.0	0.0
19	156.0	21.6	0.6
20	165.0	21.6	0.6

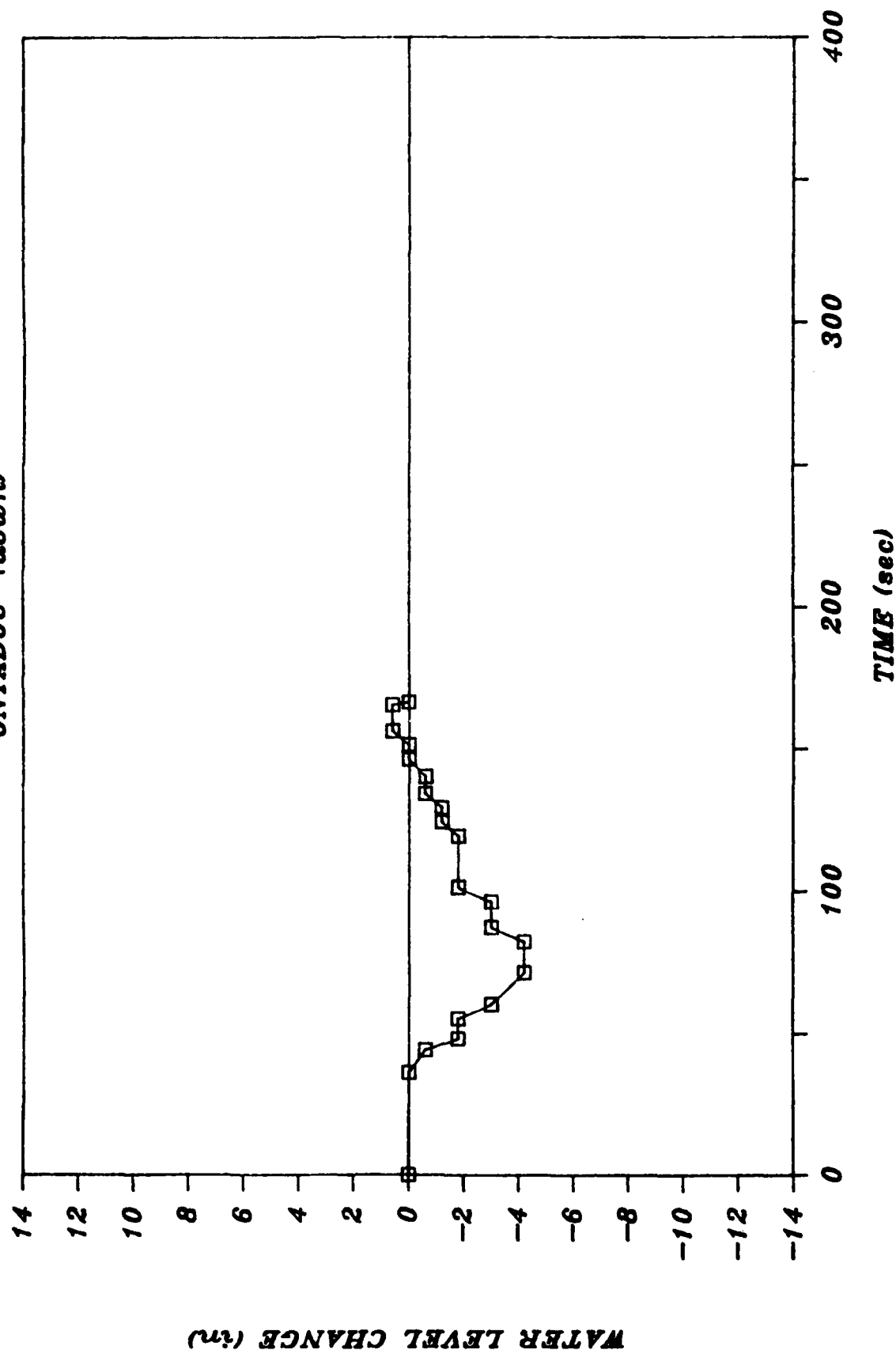
DRAWDOWN DATA (continued)

NAME OF SECTION ISLAND VIEW

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	166.0	21.0	0.0

ISLAND VIEW 11/15/84

ONTADOC (down)



NAME OF SECTION	ISLAND VIEW
1. 1st Lt. J. H. ...	
2. 1st Lt. J. H. ...	
3. 1st Lt. J. H. ...	
4. 1st Lt. J. H. ...	
5. 1st Lt. J. H. ...	
6. 1st Lt. J. H. ...	
7. 1st Lt. J. H. ...	
8. 1st Lt. J. H. ...	
9. 1st Lt. J. H. ...	
10. 1st Lt. J. H. ...	
11. 1st Lt. J. H. ...	
12. 1st Lt. J. H. ...	
13. 1st Lt. J. H. ...	
14. 1st Lt. J. H. ...	
15. 1st Lt. J. H. ...	
16. 1st Lt. J. H. ...	
17. 1st Lt. J. H. ...	
18. 1st Lt. J. H. ...	
19. 1st Lt. J. H. ...	
20. 1st Lt. J. H. ...	
21. 1st Lt. J. H. ...	
22. 1st Lt. J. H. ...	
23. 1st Lt. J. H. ...	
24. 1st Lt. J. H. ...	
25. 1st Lt. J. H. ...	
26. 1st Lt. J. H. ...	
27. 1st Lt. J. H. ...	
28. 1st Lt. J. H. ...	
29. 1st Lt. J. H. ...	
30. 1st Lt. J. H. ...	
31. 1st Lt. J. H. ...	
32. 1st Lt. J. H. ...	
33. 1st Lt. J. H. ...	
34. 1st Lt. J. H. ...	
35. 1st Lt. J. H. ...	
36. 1st Lt. J. H. ...	
37. 1st Lt. J. H. ...	
38. 1st Lt. J. H. ...	
39. 1st Lt. J. H. ...	
40. 1st Lt. J. H. ...	
41. 1st Lt. J. H. ...	
42. 1st Lt. J. H. ...	
43. 1st Lt. J. H. ...	
44. 1st Lt. J. H. ...	
45. 1st Lt. J. H. ...	
46. 1st Lt. J. H. ...	
47. 1st Lt. J. H. ...	
48. 1st Lt. J. H. ...	
49. 1st Lt. J. H. ...	
50. 1st Lt. J. H. ...	
51. 1st Lt. J. H. ...	
52. 1st Lt. J. H. ...	
53. 1st Lt. J. H. ...	
54. 1st Lt. J. H. ...	
55. 1st Lt. J. H. ...	
56. 1st Lt. J. H. ...	
57. 1st Lt. J. H. ...	
58. 1st Lt. J. H. ...	
59. 1st Lt. J. H. ...	
60. 1st Lt. J. H. ...	
61. 1st Lt. J. H. ...	
62. 1st Lt. J. H. ...	
63. 1st Lt. J. H. ...	
64. 1st Lt. J. H. ...	
65. 1st Lt. J. H. ...	
66. 1st Lt. J. H. ...	
67. 1st Lt. J. H. ...	
68. 1st Lt. J. H. ...	
69. 1st Lt. J. H. ...	
70. 1st Lt. J. H. ...	
71. 1st Lt. J. H. ...	
72. 1st Lt. J. H. ...	
73. 1st Lt. J. H. ...	
74. 1st Lt. J. H. ...	
75. 1st Lt. J. H. ...	
76. 1st Lt. J. H. ...	
77. 1st Lt. J. H. ...	
78. 1st Lt. J. H. ...	
79. 1st Lt. J. H. ...	
80. 1st Lt. J. H. ...	
81. 1st Lt. J. H. ...	
82. 1st Lt. J. H. ...	
83. 1st Lt. J. H. ...	
84. 1st Lt. J. H. ...	
85. 1st Lt. J. H. ...	
86. 1st Lt. J. H. ...	
87. 1st Lt. J. H. ...	
88. 1st Lt. J. H. ...	
89. 1st Lt. J. H. ...	
90. 1st Lt. J. H. ...	
91. 1st Lt. J. H. ...	
92. 1st Lt. J. H. ...	
93. 1st Lt. J. H. ...	
94. 1st Lt. J. H. ...	
95. 1st Lt. J. H. ...	
96. 1st Lt. J. H. ...	
97. 1st Lt. J. H. ...	
98. 1st Lt. J. H. ...	
99. 1st Lt. J. H. ...	
100. 1st Lt. J. H. ...	

XX

DATE OF OBSERVATION 11/15/84

VESSEL NAME **ONTADOC**

DIRECTION	DOWNBOUND
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

VESSEL LENGTH in feet = 355

VESSEL BEAM in feet = 49

VESSEL DRAFT in feet = 24.5

VESSEL SPEED in foot/sec. = 15.4

BOW ON TIME in sec = 54

STERN ON TIME in sec = 77

DISTANCE TO STAFF GAUGE from green side in feet = 2211

BACKGROUND READING in inches = 14.5

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	14.5	0.0
2	11.0	14.5	0.0
3	16.0	14.0	-0.5
4	31.0	13.5	-1.0
5	39.0	13.0	-1.5
6	47.0	13.0	-1.5
7	56.0	13.0	-1.5
8	60.0	13.0	-1.5
9	69.0	12.0	-2.5
10	73.0	11.5	-3.0
11	81.0	10.0	-4.5
12	83.0	10.0	-4.5
13	84.0	9.5	-5.0
14	88.0	9.5	-5.0
15	89.0	9.0	-5.5
16	91.0	9.0	-5.5
17	93.0	8.5	-6.0
18	96.0	8.5	-6.0
19	100.0	8.5	-6.0
20	104.0	9.0	-5.5

DRAWDOWN DATA (continued)

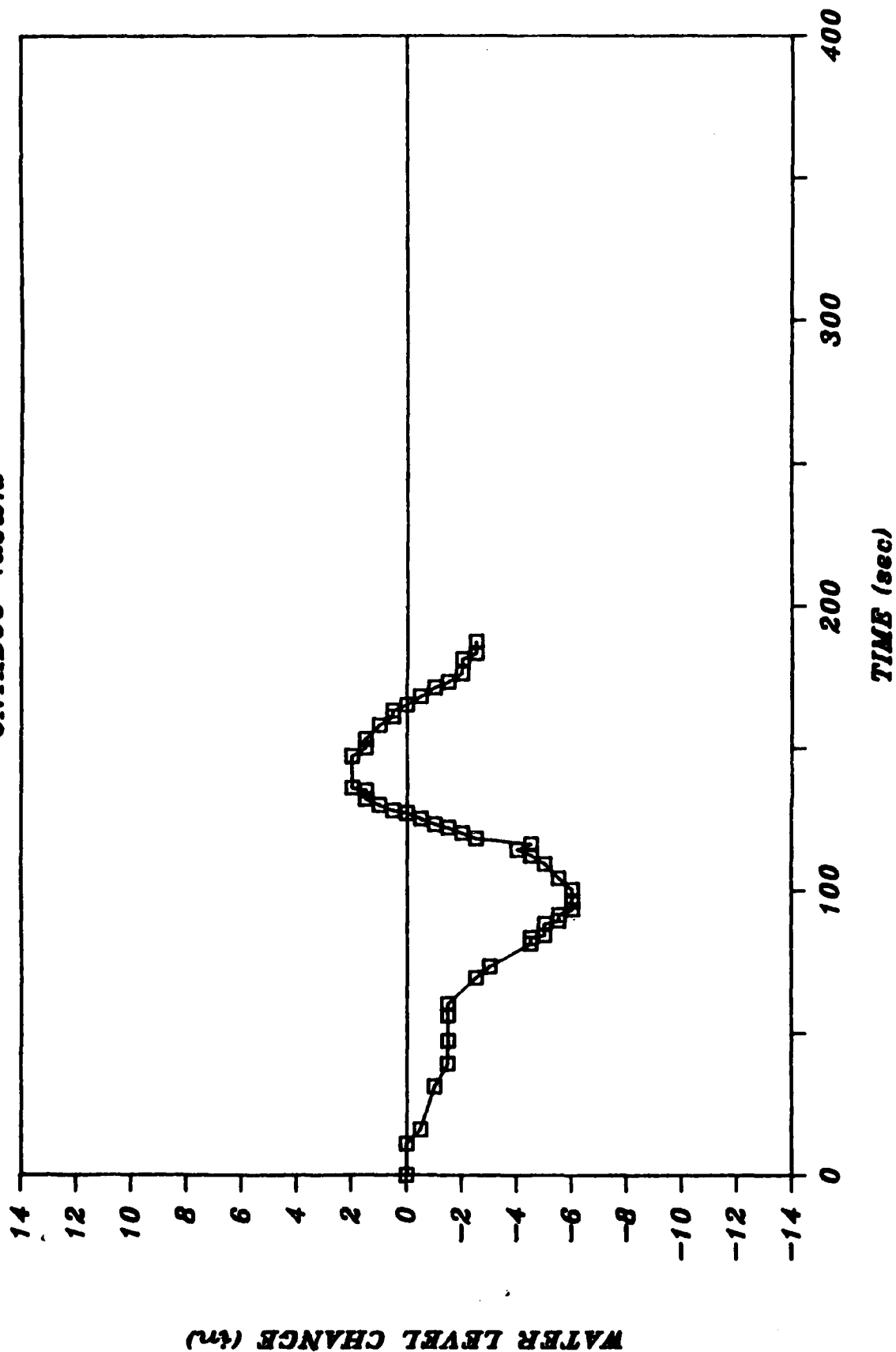
NAME OF SECTION	ISLAND VIEW
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

[illegible]

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	109.0	9.5	-5.0
22	112.0	10.0	-4.5
23	114.0	10.5	-4.0
24	116.0	10.0	-4.5
25	118.0	12.0	-2.5
26	120.0	12.5	-2.0
27	122.0	13.0	-1.5
28	123.0	13.5	-1.0
29	125.0	14.0	-0.5
30	127.0	14.5	0.0
31	128.0	15.0	0.5
32	130.0	15.5	1.0
33	132.0	16.0	1.5
34	135.0	16.0	1.5
35	136.0	16.5	2.0
36	147.0	16.5	2.0
37	150.0	16.0	1.5
38	153.0	16.0	1.5
39	158.0	15.5	1.0
40	161.0	15.0	0.5
41	163.0	15.0	0.5
42	165.0	14.5	0.0
43	168.0	14.0	-0.5
44	171.0	13.5	-1.0
45	173.0	13.0	-1.5
46	176.0	12.5	-2.0
47	181.0	12.5	-2.0
48	183.0	12.0	-2.5
49	187.0	12.0	-2.5

ISLAND VIEW 11/15/84

ONTADOC (down)



DRAWDOWN DATA

NAME OF SECTION	ISLAND VIEW
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

VESSEL NAME PHILLIP R. CLARKE

VESSEL LENGTH in feet = 767

VESSEL DRAFT in feet = 28

BOW ON TIME in sec = 68

DISTANCE TO STAFF GAUGE from green side in feet = 115

BACKGROUND READING in inches = 24

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	24.0	0.0
2	32.0	24.0	0.0
3	40.0	23.5	-0.5
4	50.0	23.0	-1.0
5	61.0	23.0	-1.0
6	69.0	22.5	-1.5
7	75.0	22.5	-1.5
8	79.0	22.0	-2.0
9	88.0	22.0	-2.0
10	90.0	22.5	-1.5
11	97.0	22.5	-1.5
12	99.0	22.0	-2.0
13	106.0	22.0	-2.0
14	110.0	21.5	-2.5
15	112.0	21.0	-3.0
16	117.0	21.0	-3.0
17	118.0	21.5	-2.5
18	127.0	21.5	-2.5
19	129.0	21.0	-3.0
20	134.0	21.0	-3.0

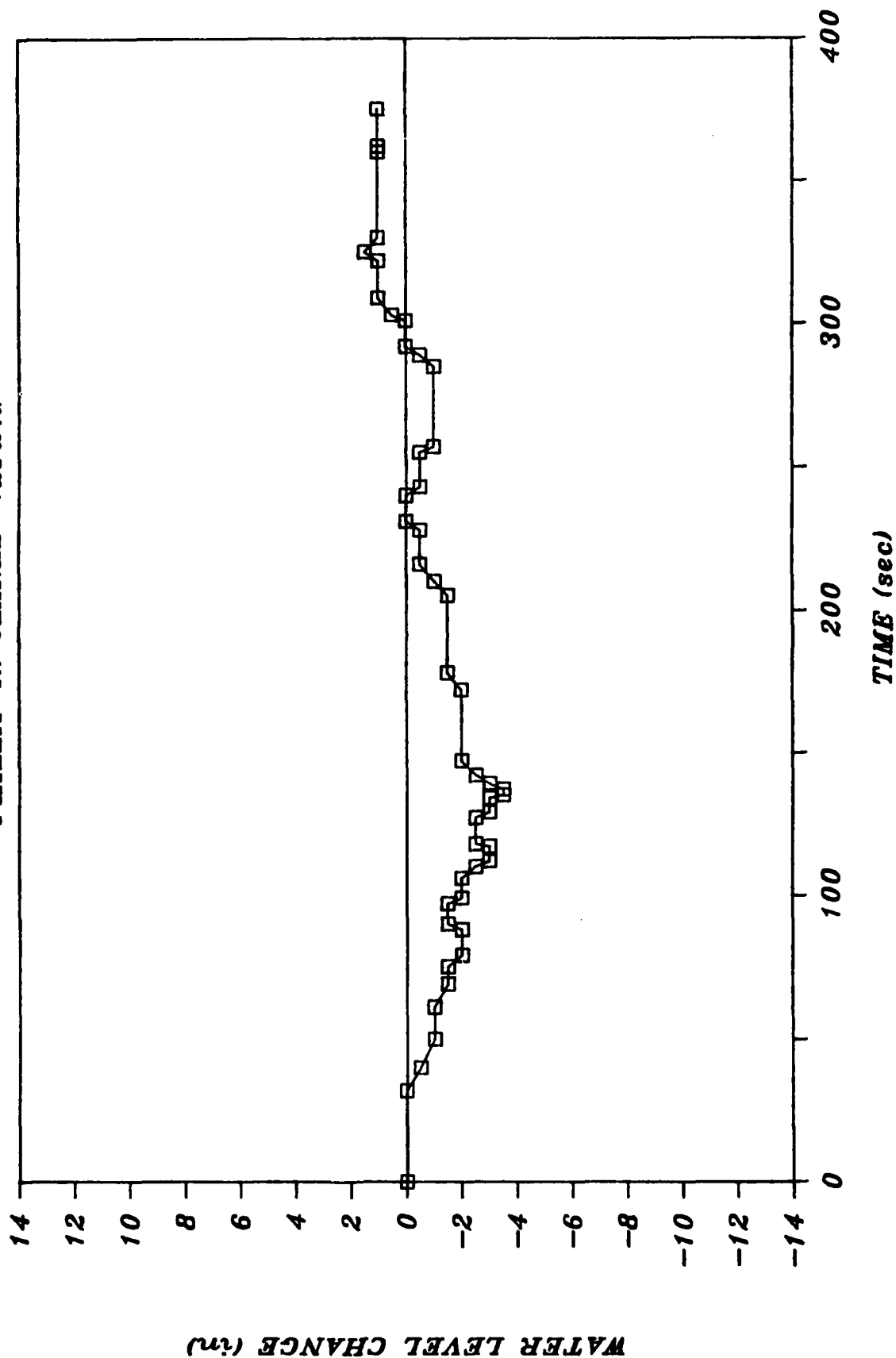
DRAWDOWN DATA (continued)

NAME OF SECTION ISLAND VIEW

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	135.0	20.5	-3.5
22	137.0	20.5	-3.5
23	139.0	21.0	-3.0
24	142.0	21.5	-2.5
25	147.0	22.0	-2.0
26	172.0	22.0	-2.0
27	178.0	22.5	-1.5
28	205.0	22.5	-1.5
29	210.0	23.0	-1.0
30	216.0	23.5	-0.5
31	228.0	23.5	-0.5
32	231.0	24.0	0.0
33	240.0	24.0	0.0
34	243.0	23.5	-0.5
35	255.0	23.5	-0.5
36	257.0	23.0	-1.0
37	285.0	23.0	-1.0
38	289.0	23.5	-0.5
39	292.0	24.0	0.0
40	301.0	24.0	0.0
41	303.0	24.5	0.5
42	309.0	25.0	1.0
43	322.0	25.0	1.0
44	325.0	25.5	1.5
45	330.0	25.0	1.0
46	360.0	25.0	1.0
47	362.0	25.0	1.0
48	375.0	25.0	1.0

ISLAND VIEW 11/17/84

PHILLIP R. CLARKE (down)



 DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW
 #####

DATE OF OBSERVATION 11/17/84

VESSEL NAME PHILLIP R. CLARKE

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 767

VESSEL BEAM in feet = 70

VESSEL DRAFT in feet = 28

VESSEL SPEED in feet/sec. = 12.8

BOW ON TIME in sec = 68

STERN ON TIME in sec = 128

DISTANCE TO STAFF GAUGE from green side in feet = 1877

BACKGROUND READING in inches = 27

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	27.0	0.0
2	30.0	27.0	0.0
3	35.0	26.4	-0.6
4	38.0	27.0	0.0
5	42.0	26.4	-0.6
6	46.0	26.4	-0.6
7	48.0	25.8	-1.2
8	56.0	25.8	-1.2
9	60.0	24.6	-2.4
10	67.0	24.0	-3.0
11	70.0	24.6	-2.4
12	87.0	24.6	-2.4
13	90.0	25.2	-1.8
14	92.0	24.6	-2.4
15	97.0	24.6	-2.4
16	99.0	25.8	-1.2
17	103.0	25.2	-1.8
18	110.0	25.2	-1.8
19	115.0	24.6	-2.4
20	126.0	24.6	-2.4

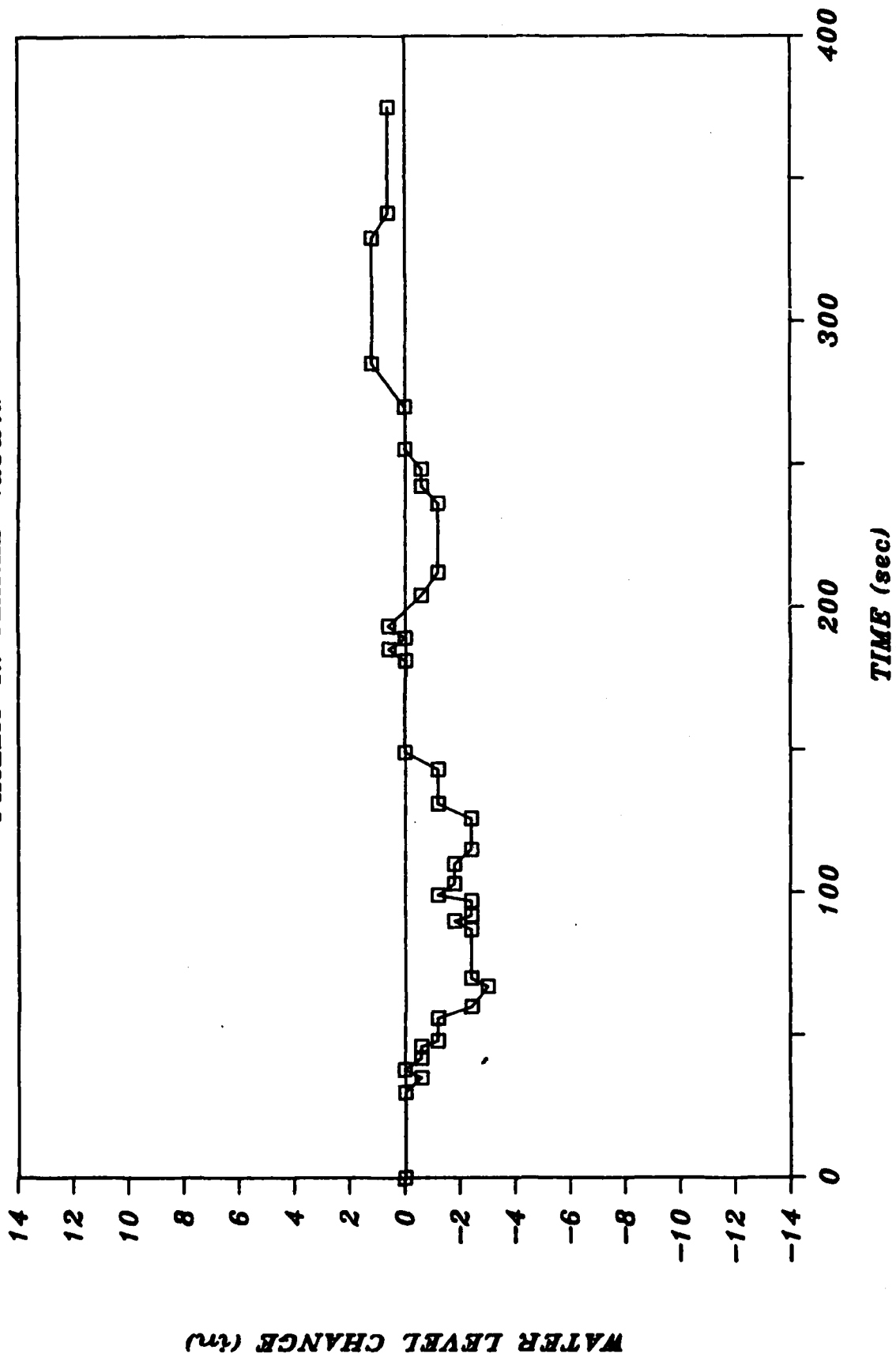
DRAWDOWN DATA (continued)

NAME OF SECTION ISLAND VIEW

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	131.0	25.8	-1.2
22	143.0	25.8	-1.2
23	149.0	27.0	0.0
24	181.0	27.0	0.0
25	185.0	27.6	0.6
26	189.0	27.0	0.0
27	193.0	27.6	0.6
28	204.0	26.4	-0.6
29	212.0	25.8	-1.2
30	236.0	25.8	-1.2
31	242.0	26.4	-0.6
32	248.0	26.4	-0.6
33	255.0	27.0	0.0
34	270.0	27.0	0.0
35	285.0	28.2	1.2
36	329.0	28.2	1.2
37	338.0	27.6	0.6
38	375.0	27.6	0.6

ISLAND VIEW 11/17/84

PHILLIP R. CLARKE (down)



DRAWDOWN DATA

NAME OF SECTION	ISLAND VIEW
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

DATE OF OBSERVATION 11/17/84

VESSEL NAME PHILLIP R. CLARKE

DIRECTION	DOWNBOUND
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

VESSEL LENGTH in feet = 767

VESSEL BEAM in feet = 70

VESSEL DRAFT in feet = 28

VESSEL SPEED in feet/sec. = 12.8

BOW ON TIME in sec = 68

STERN ON TIME in sec = 128

DISTANCE TO STAFF GAUGE from green side in feet = 2197

BACKGROUND READING in inches = 16.5

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	16.5	0.0
2	11.0	16.5	0.0
3	18.0	16.0	-0.5
4	27.0	15.0	-1.5
5	33.0	15.0	-1.5
6	39.0	14.5	-2.0
7	41.0	14.0	-2.5
8	47.0	14.5	-2.0
9	51.0	14.0	-2.5
10	57.0	13.5	-3.0
11	62.0	13.5	-3.0
12	65.0	13.0	-3.5
13	97.0	13.0	-3.5
14	108.0	13.5	-3.0
15	112.0	13.5	-3.0
16	114.0	14.0	-2.5
17	123.0	14.5	-2.0
18	130.0	14.0	-2.5
19	131.0	14.5	-2.0
20	139.0	15.0	-1.5

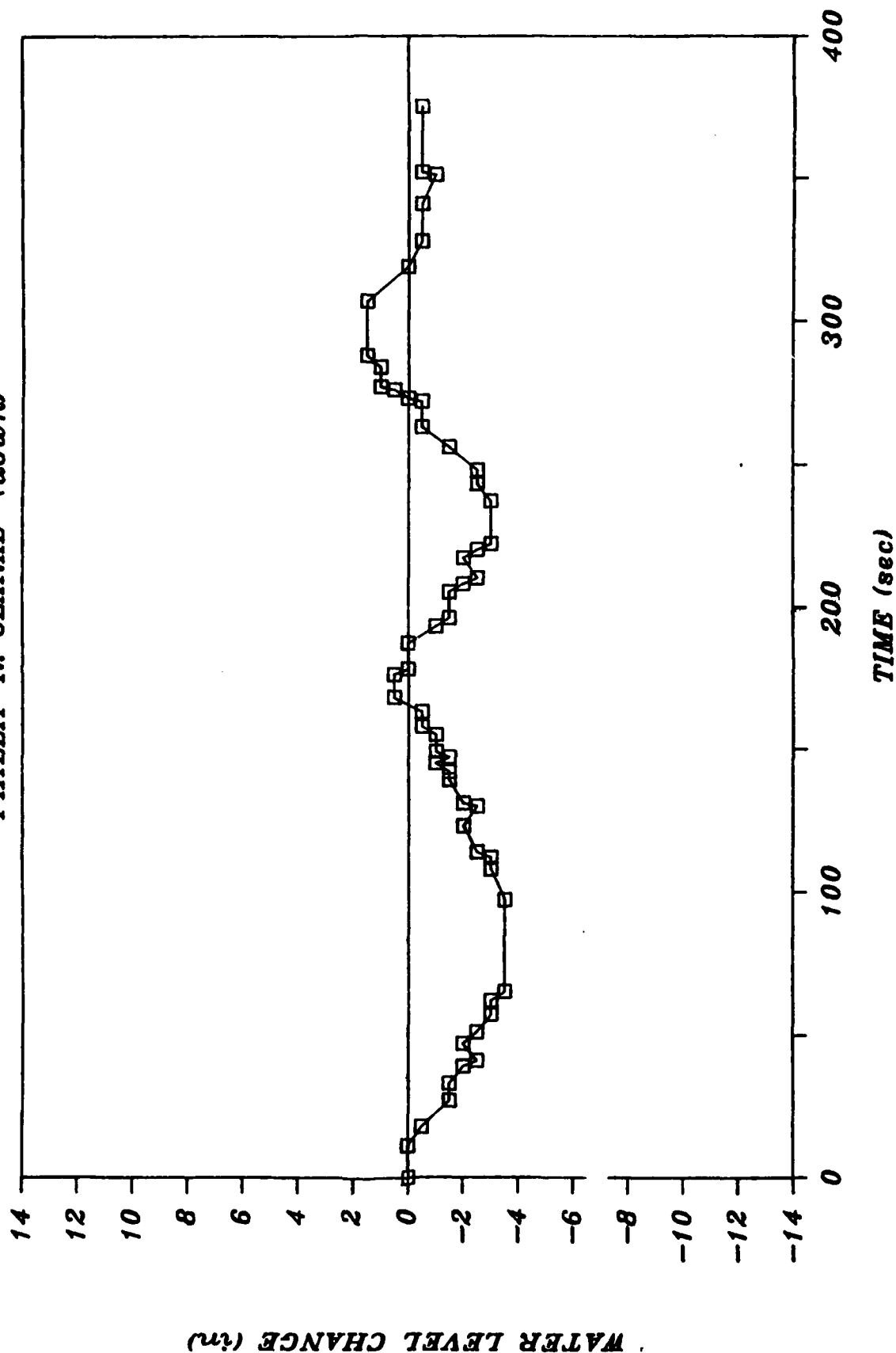
DRAWDOWN DATA (continued)

NAME OF SECTION ISLAND VIEW

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	142.0	15.0	-1.5
22	145.0	15.5	-1.0
23	147.0	15.0	-1.5
24	149.0	15.5	-1.0
25	155.0	15.5	-1.0
26	158.0	16.0	-0.5
27	163.0	16.0	-0.5
28	168.0	17.0	0.5
29	176.0	17.0	0.5
30	178.0	16.5	0.0
31	187.0	16.5	0.0
32	193.0	15.5	-1.0
33	196.0	15.0	-1.5
34	205.0	15.0	-1.5
35	208.0	14.5	-2.0
36	210.0	14.0	-2.5
37	217.0	14.5	-2.0
38	220.0	14.0	-2.5
39	222.0	13.5	-3.0
40	237.0	13.5	-3.0
41	243.0	14.0	-2.5
42	248.0	14.0	-2.5
43	256.0	15.0	-1.5
44	263.0	16.0	-0.5
45	272.0	16.0	-0.5
46	273.0	16.5	0.0
47	276.0	17.0	0.5
48	277.0	17.5	1.0
49	284.0	17.5	1.0
50	288.0	18.0	1.5
51	307.0	18.0	1.5
52	319.0	16.5	0.0
53	328.0	16.0	-0.5
54	341.0	16.0	-0.5
55	351.0	15.5	-1.0
56	352.0	16.0	-0.5
57	375.0	16.0	-0.5

ISLAND VIEW 11/17/84

PHILLIP R. CLARKE (down)



DRAWDOWN DATA

[illegible]

BACKGROUND READING in inches = 21

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	21.0	0.0
2	32.0	21.0	0.0
3	36.0	20.5	-0.5
4	40.0	20.0	-1.0
5	48.0	19.5	-1.5
6	58.0	19.5	-1.5
7	60.0	19.0	-2.0
8	78.0	18.0	-3.0
9	80.0	17.5	-3.5
10	91.0	18.5	-2.5
11	104.0	17.5	-3.5
12	120.0	18.0	-3.0
13	124.0	18.5	-2.5
14	129.0	19.0	-2.0
15	135.0	19.0	-2.0
16	138.0	19.5	-1.5
17	144.0	19.5	-1.5
18	146.0	20.0	-1.0
19	149.0	19.5	-1.5
20	167.0	19.5	-1.5

DRAWDOWN DATA (continued)

NAME OF SECTION ISLAND VIEW

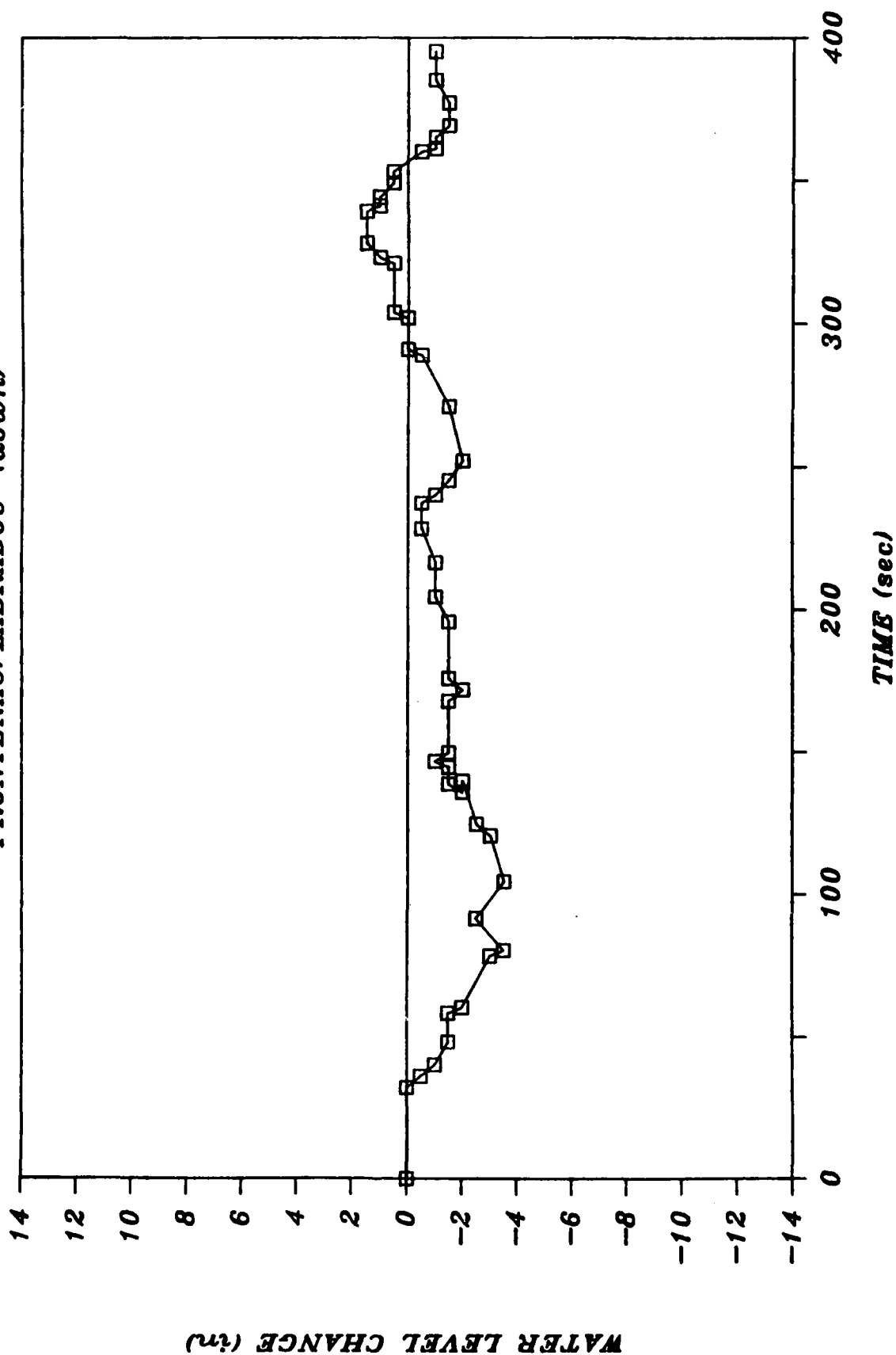
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	171.0	19.0	-2.0
22	175.0	19.5	-1.5
23	195.0	19.5	-1.5
24	204.0	20.0	-1.0
25	216.0	20.0	-1.0
26	228.0	20.5	-0.5
27	237.0	20.5	-0.5
28	240.0	20.0	-1.0
29	245.0	19.5	-1.5
30	252.0	19.0	-2.0
31	271.0	19.5	-1.5
32	289.0	20.5	-0.5
33	291.0	21.0	0.0
34	302.0	21.0	0.0
35	304.0	21.5	0.5
36	321.0	21.5	0.5
37	323.0	22.0	1.0
38	328.0	22.5	1.5
39	339.0	22.5	1.5
40	341.0	22.0	1.0
41	344.0	22.0	1.0
42	349.0	21.5	0.5
43	353.0	21.5	0.5
44	360.0	20.5	-0.5
45	361.0	20.0	-1.0
46	365.0	20.0	-1.0
47	369.0	19.5	-1.5
48	377.0	19.5	-1.5
49	385.0	20.0	-1.0
50	395.0	20.0	-1.0
51	404.0	20.5	-0.5
52	419.0	20.5	-0.5
53	424.0	20.5	-0.5
54	427.0	20.0	-1.0
55	429.0	20.5	-0.5
56	431.0	20.0	-1.0
57	451.0	20.0	-1.0
58	468.0	21.0	0.0
59	474.0	21.0	0.0
60	476.0	21.5	0.5
61	485.0	21.5	0.5
62	489.0	22.0	1.0
63	527.0	22.0	1.0
64	530.0	21.5	0.5

[illegible]

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
65	535.0	21.0	0.0
66	540.0	20.5	-0.5
67	546.0	20.0	-1.0
68	551.0	20.0	-1.0
69	555.0	19.5	-1.5
70	570.0	19.5	-1.5
71	575.0	20.0	-1.0
72	585.0	20.0	-1.0
73	589.0	20.5	-0.5
74	604.0	20.5	-0.5
75	607.0	20.8	-0.3
76	614.0	20.8	-0.3
77	618.0	20.5	-0.5
78	630.0	20.5	-0.5

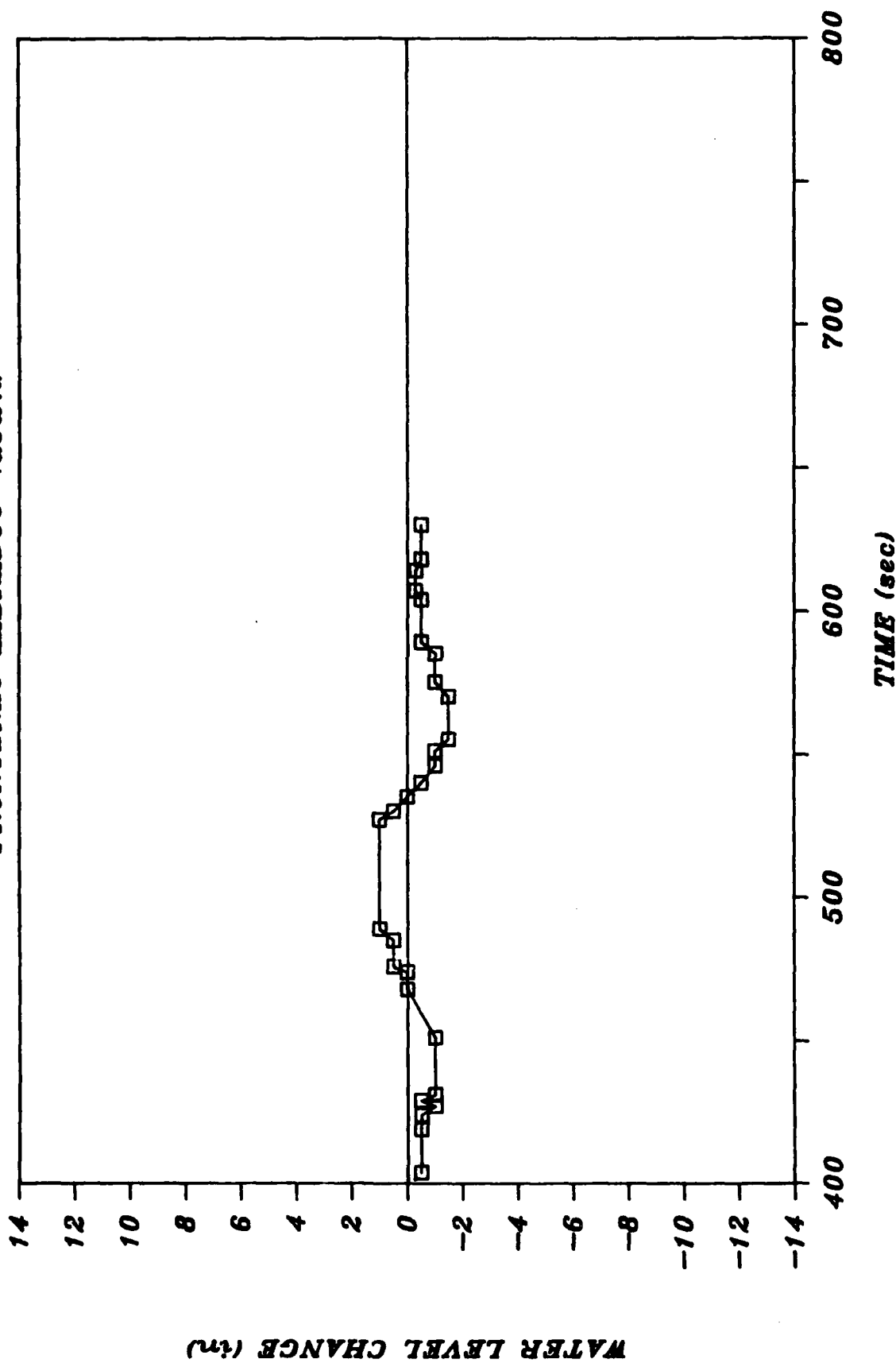
ISLAND VIEW 11/17/84

FRONTENAC/LABRADOC (down)



ISLAND VIEW 11/17/84

FRONTENAC/LABRADOC (down)



DRAWDOWN DATA

NAME OF SECTION	ISLAND VIEW
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

VESSEL NAME FRONTENAC/LABRADO

VESSEL LENGTH in feet = 730/315

VESSEL DRAFT in foot = 27/21

BOW ON TIME in sec = 58/374

DISTANCE TO STAFF GAUGE from green side in feet = 1877

BACKGROUND READING in inches = 24

1	0.0	24.0	0.0
2	12.0	24.0	0.0
3	26.0	22.8	-1.2
4	30.0	22.8	-1.2
5	34.0	22.2	-1.8
6	39.0	21.6	-2.4
7	44.0	21.6	-2.4
8	48.0	21.0	-3.0
9	51.0	21.0	-3.0
10	66.0	20.4	-3.6
11	71.0	20.4	-3.6
12	81.0	21.0	-3.0
13	107.0	21.0	-3.0
14	119.0	21.6	-2.4
15	124.0	21.6	-2.4
16	129.0	22.2	-1.8
17	132.0	22.8	-1.2
18	144.0	24.0	0.0
19	148.0	24.0	0.0
20	157.0	24.6	0.6

[illegible]

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	162.0	25.2	1.2
22	167.0	24.0	0.0
23	187.0	24.0	0.0
24	192.0	23.4	-0.6
25	197.0	22.8	-1.2
26	202.0	22.2	-1.8
27	208.0	21.6	-2.4
28	215.0	21.6	-2.4
29	223.0	22.2	-1.8
30	238.0	22.2	-1.8
31	244.0	22.8	-1.2
32	249.0	22.8	-1.2
33	255.0	23.4	-0.6
34	270.0	23.4	-0.6
35	278.0	24.0	0.0
36	285.0	24.0	0.0
37	293.0	25.2	1.2
38	313.0	24.0	0.0
39	326.0	24.0	0.0
40	344.0	23.4	-0.6
41	355.0	23.4	-0.6
42	363.0	24.0	0.0
43	374.0	24.0	0.0
44	384.0	24.6	0.6
45	389.0	24.6	0.6
46	392.0	25.2	1.2
47	402.0	25.2	1.2
48	410.0	24.6	0.6
49	419.0	25.2	1.2
50	432.0	25.2	1.2
51	445.0	24.0	0.0
52	468.0	23.4	-0.6
53	472.0	25.2	1.2
54	503.0	25.2	1.2
55	506.0	23.4	-0.6
56	514.0	23.4	-0.6
57	522.0	24.0	0.0
58	526.0	24.0	0.0
59	535.0	23.4	-0.6
60	541.0	25.2	1.2
61	569.0	25.2	1.2
62	572.0	25.8	1.8
63	582.0	25.8	1.8
64	589.0	25.2	1.2

#####

DRAWDOWN DATA (continued)

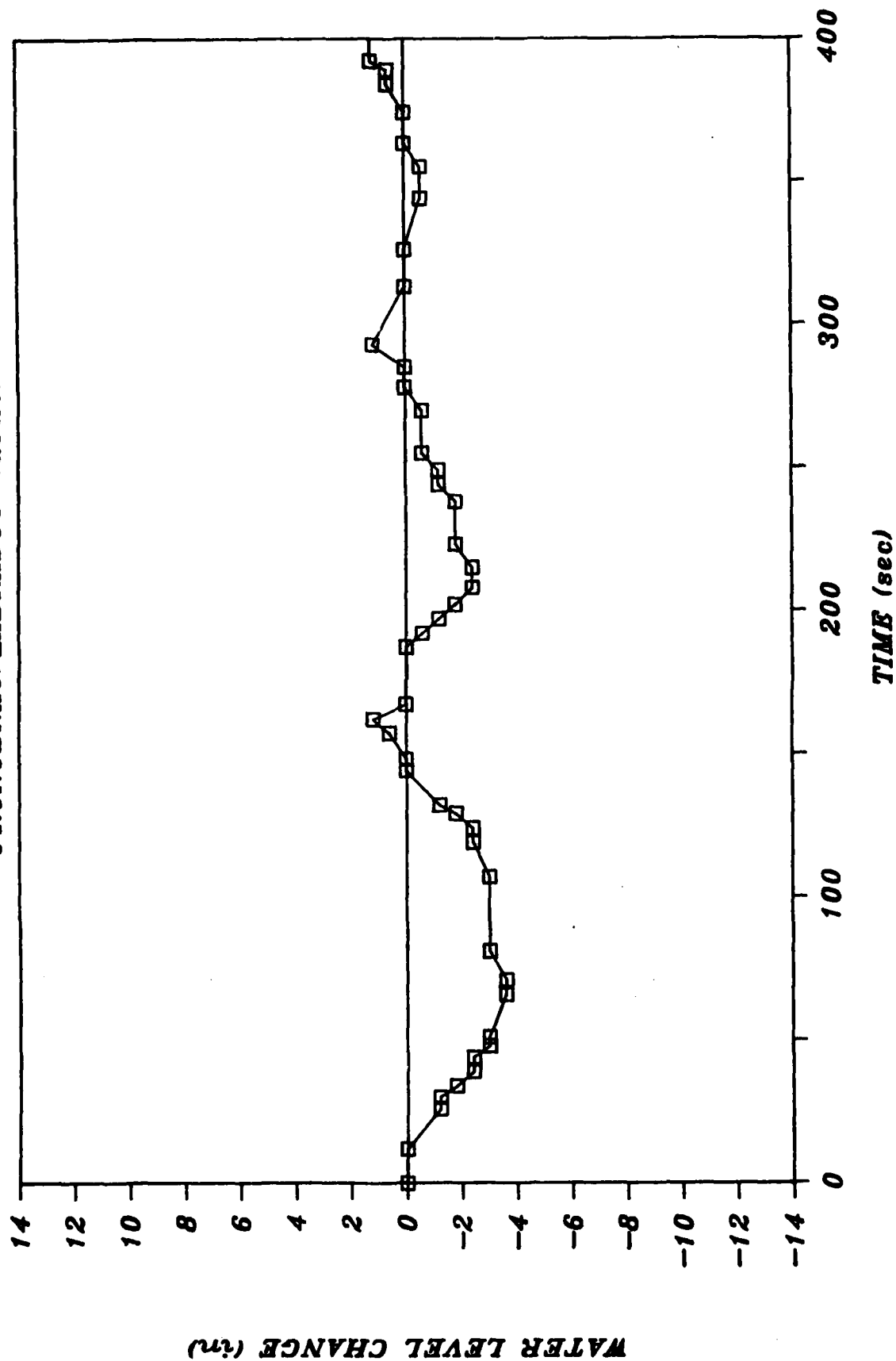
NAME OF SECTION ISLAND VIEW

#####

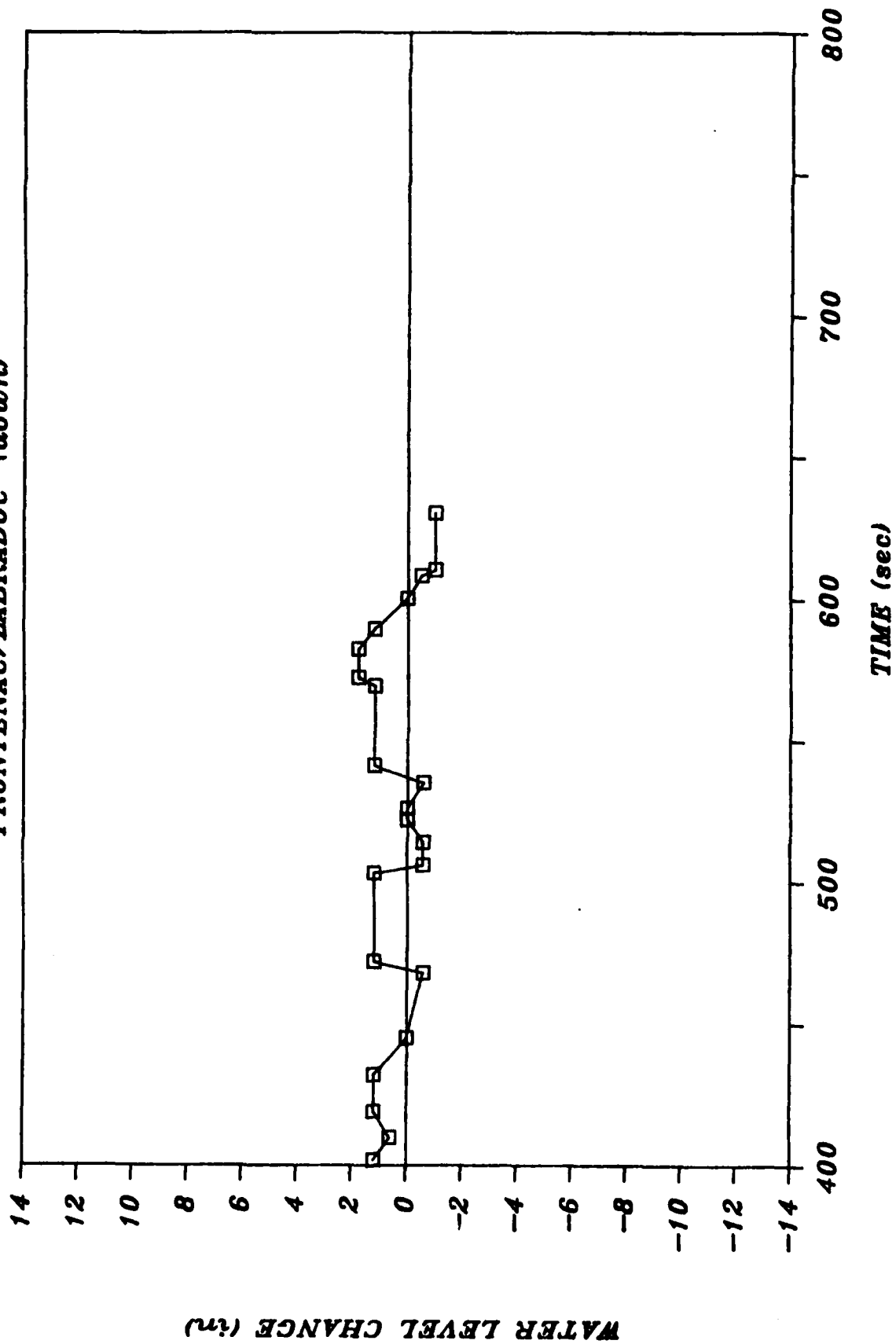
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
65	600.0	25.2	1.2
66	608.0	24.6	0.6
67	610.0	24.0	0.0
68	630.0	24.0	0.0

ISLAND VIEW 11/17/84

FRONTENAC/LABRADOC (down)



ISLAND VIEW 11/17/84
FRONTENAC/LABRADORC (down)



oo

DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW

oo

DATE OF OBSERVATION 11/17/84

VESSEL NAME STANDACONA

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 664

VESSEL BEAM in feet = 67

VESSEL DRAFT in feet = 15

VESSEL SPEED in feet/sec. = 14.4

BOW ON TIME in sec = 85

STERN ON TIME in sec = 131

DISTANCE TO STAFF GAUGE from green side in feet = 115

BACKGROUND READING in inches = 25.5

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	25.5	0.0
2	9.0	25.0	-0.5
3	76.0	25.0	-0.5
4	87.0	24.5	-1.0
5	93.0	24.5	-1.0
6	107.0	24.0	-1.5
7	130.0	24.0	-1.5
8	137.0	23.5	-2.0
9	166.0	23.5	-2.0
10	171.0	24.0	-1.5
11	180.0	24.0	-1.5
12	187.0	24.5	-1.0
13	196.0	24.5	-1.0
14	206.0	24.0	-1.5
15	225.0	24.0	-1.5
16	227.0	24.5	-1.0
17	231.0	25.0	-0.5
18	238.0	25.0	-0.5
19	240.0	25.5	0.0
20	245.0	25.5	0.0

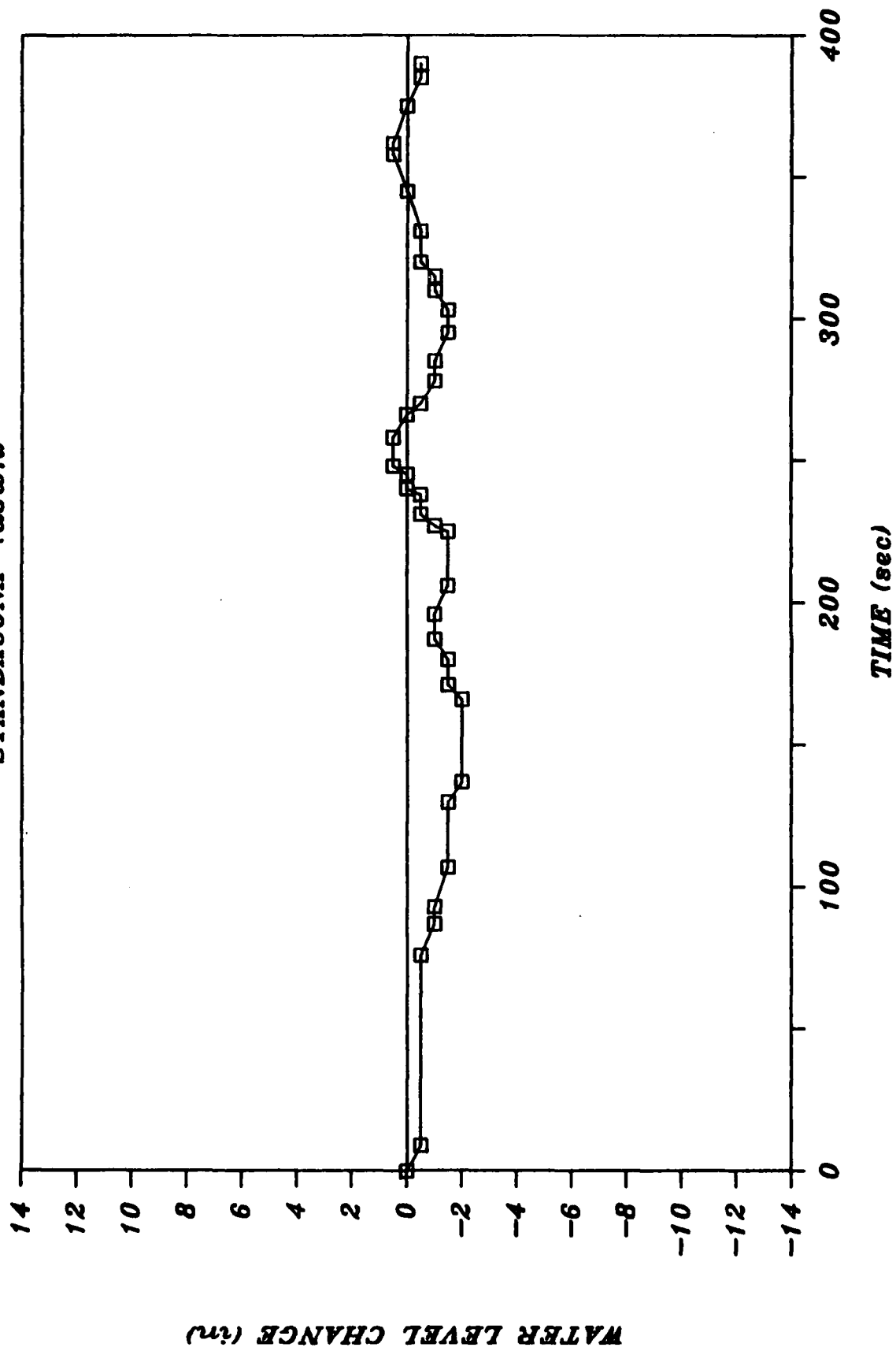
DRAWDOWN DATA (continued)

NAME OF SECTION ISLAND VIEW

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	248.0	26.0	0.5
22	258.0	26.0	0.5
23	266.0	25.5	0.0
24	270.0	25.0	-0.5
25	278.0	24.5	-1.0
26	285.0	24.5	-1.0
27	295.0	24.0	-1.5
28	303.0	24.0	-1.5
29	310.0	24.5	-1.0
30	315.0	24.5	-1.0
31	320.0	25.0	-0.5
32	331.0	25.0	-0.5
33	345.0	25.5	0.0
34	358.0	26.0	0.5
35	362.0	26.0	0.5
36	375.0	25.5	0.0
37	385.0	25.0	-0.5
38	390.0	25.0	-0.5
39	405.0	24.5	-1.0
40	409.0	24.5	-1.0
41	416.0	24.0	-1.5
42	421.0	24.5	-1.0
43	434.0	24.5	-1.0
44	441.0	25.0	-0.5
45	480.0	25.0	-0.5

ISLAND VIEW 11/17/84

STANDACONA (down)



DRAWDOWN DATA

NAME OF SECTION	ISLAND VIEW
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

BACKGROUND READING in inches = 27.6

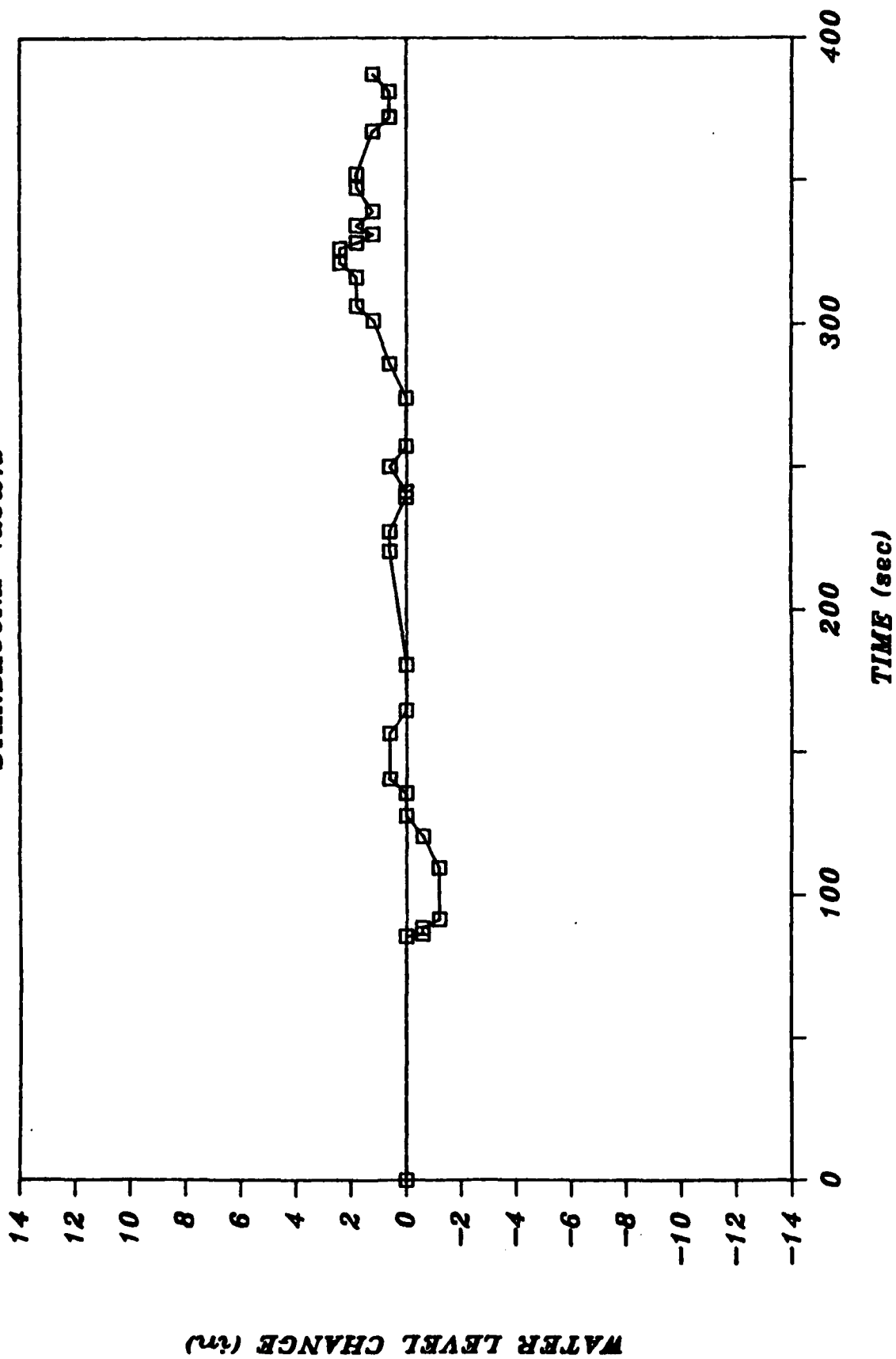
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	27.6	0.0
2	85.0	27.6	0.0
3	86.0	27.0	-0.6
4	88.0	27.0	-0.6
5	91.0	26.4	-1.2
6	109.0	26.4	-1.2
7	120.0	27.0	-0.6
8	127.0	27.6	0.0
9	135.0	27.6	0.0
10	140.0	28.2	0.6
11	156.0	28.2	0.6
12	164.0	27.6	0.0
13	180.0	27.6	0.0
14	220.0	28.2	0.6
15	227.0	28.2	0.6
16	239.0	27.6	0.0
17	241.0	27.6	0.0
18	250.0	28.2	0.6
19	257.0	27.6	0.0
20	274.0	27.6	0.0

 DRAWDOWN DATA (continued)

NAME OF SECTION ISLAND VIEW

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	286.0	28.2	0.6
22	301.0	28.8	1.2
23	306.0	29.4	1.8
24	316.0	29.4	1.8
25	321.0	30.0	2.4
26	326.0	30.0	2.4
27	328.0	29.4	1.8
28	331.0	28.8	1.2
29	334.0	29.4	1.8
30	339.0	28.8	1.2
31	347.0	29.4	1.8
32	352.0	29.4	1.8
33	368.0	28.8	1.2
34	372.0	28.2	0.6
35	381.0	28.2	0.6
36	387.0	28.8	1.2
37	480.0	28.8	1.2

ISLAND VIEW 11/17/84
STANDACONA (down)



oo

DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW
oo

DATE OF OBSERVATION 11/17/84

VESSEL NAME STANDACONA

DIRECTION DOW. BOUND

VESSEL LENGTH in feet = 664

VESSEL BEAM in feet = 67

VESSEL DRAFT in feet = 15

VESSEL SPEED in feet/sec. = 14.4

BOW ON TIME in sec = 85

STERN ON TIME in sec = 131

DISTANCE TO STAFF GAUGE from green side in feet = 2197

BACKGROUND READING in inches = 18

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	18.0	0.0
2	23.0	18.0	0.0
3	32.0	17.5	-0.5
4	43.0	17.5	-0.5
5	47.0	17.0	-1.0
6	56.0	16.5	-1.5
7	58.0	16.0	-2.0
8	69.0	16.0	-2.0
9	71.0	16.5	-1.5
10	74.0	15.0	-3.0
11	77.0	16.0	-2.0
12	79.0	16.5	-1.5
13	86.0	15.0	-3.0
14	87.0	15.5	-2.5
15	94.0	15.0	-3.0
16	96.0	15.0	-3.0
17	100.0	14.5	-3.5
18	102.0	14.5	-3.5
19	106.0	14.0	-4.0
20	123.0	14.0	-4.0

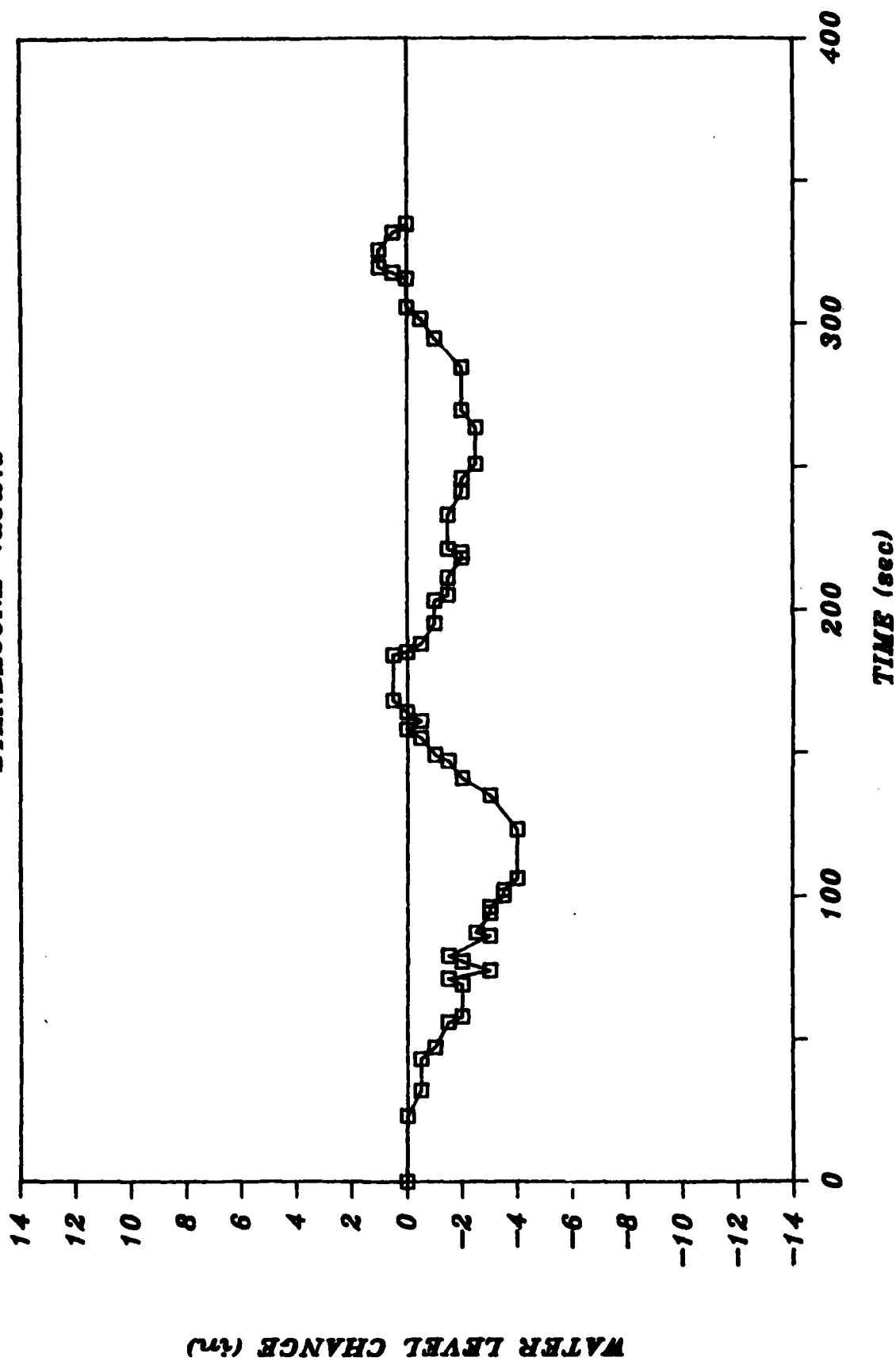
DRAWDOWN DATA (continued)

NAME OF SECTION	ISLAND VIEW
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

DATA POINT	TIME(sec)	READING(1n)	CHANGE FROM BG(1n)
------------	-----------	-------------	--------------------

ISLAND VIEW 11/17/84

STANDACONA (down)



DRAWDOWN DATA

NAME OF SECTION	ISLAND VIEW
1. 1st Lt. J. H. ...	
2. 1st Lt. J. H. ...	
3. 1st Lt. J. H. ...	
4. 1st Lt. J. H. ...	
5. 1st Lt. J. H. ...	
6. 1st Lt. J. H. ...	
7. 1st Lt. J. H. ...	
8. 1st Lt. J. H. ...	
9. 1st Lt. J. H. ...	
10. 1st Lt. J. H. ...	
11. 1st Lt. J. H. ...	
12. 1st Lt. J. H. ...	
13. 1st Lt. J. H. ...	
14. 1st Lt. J. H. ...	
15. 1st Lt. J. H. ...	
16. 1st Lt. J. H. ...	
17. 1st Lt. J. H. ...	
18. 1st Lt. J. H. ...	
19. 1st Lt. J. H. ...	
20. 1st Lt. J. H. ...	
21. 1st Lt. J. H. ...	
22. 1st Lt. J. H. ...	
23. 1st Lt. J. H. ...	
24. 1st Lt. J. H. ...	
25. 1st Lt. J. H. ...	
26. 1st Lt. J. H. ...	
27. 1st Lt. J. H. ...	
28. 1st Lt. J. H. ...	
29. 1st Lt. J. H. ...	
30. 1st Lt. J. H. ...	
31. 1st Lt. J. H. ...	
32. 1st Lt. J. H. ...	
33. 1st Lt. J. H. ...	
34. 1st Lt. J. H. ...	
35. 1st Lt. J. H. ...	
36. 1st Lt. J. H. ...	
37. 1st Lt. J. H. ...	
38. 1st Lt. J. H. ...	
39. 1st Lt. J. H. ...	
40. 1st Lt. J. H. ...	
41. 1st Lt. J. H. ...	
42. 1st Lt. J. H. ...	
43. 1st Lt. J. H. ...	
44. 1st Lt. J. H. ...	
45. 1st Lt. J. H. ...	
46. 1st Lt. J. H. ...	
47. 1st Lt. J. H. ...	
48. 1st Lt. J. H. ...	
49. 1st Lt. J. H. ...	
50. 1st Lt. J. H. ...	
51. 1st Lt. J. H. ...	
52. 1st Lt. J. H. ...	
53. 1st Lt. J. H. ...	
54. 1st Lt. J. H. ...	
55. 1st Lt. J. H. ...	
56. 1st Lt. J. H. ...	
57. 1st Lt. J. H. ...	
58. 1st Lt. J. H. ...	
59. 1st Lt. J. H. ...	
60. 1st Lt. J. H. ...	
61. 1st Lt. J. H. ...	
62. 1st Lt. J. H. ...	
63. 1st Lt. J. H. ...	
64. 1st Lt. J. H. ...	
65. 1st Lt. J. H. ...	
66. 1st Lt. J. H. ...	
67. 1st Lt. J. H. ...	
68. 1st Lt. J. H. ...	
69. 1st Lt. J. H. ...	
70. 1st Lt. J. H. ...	
71. 1st Lt. J. H. ...	
72. 1st Lt. J. H. ...	
73. 1st Lt. J. H. ...	
74. 1st Lt. J. H. ...	
75. 1st Lt. J. H. ...	
76. 1st Lt. J. H. ...	
77. 1st Lt. J. H. ...	
78. 1st Lt. J. H. ...	
79. 1st Lt. J. H. ...	
80. 1st Lt. J. H. ...	
81. 1st Lt. J. H. ...	
82. 1st Lt. J. H. ...	
83. 1st Lt. J. H. ...	
84. 1st Lt. J. H. ...	
85. 1st Lt. J. H. ...	
86. 1st Lt. J. H. ...	
87. 1st Lt. J. H. ...	
88. 1st Lt. J. H. ...	
89. 1st Lt. J. H. ...	
90. 1st Lt. J. H. ...	
91. 1st Lt. J. H. ...	
92. 1st Lt. J. H. ...	
93. 1st Lt. J. H. ...	
94. 1st Lt. J. H. ...	
95. 1st Lt. J. H. ...	
96. 1st Lt. J. H. ...	
97. 1st Lt. J. H. ...	
98. 1st Lt. J. H. ...	
99. 1st Lt. J. H. ...	
100. 1st Lt. J. H. ...	

DATE OF OBSERVATION 5/27/85

VESSEL NAME OTTERCLIFFE HALL

DIRECTION	DOWNBOUND
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 25.75

VESSEL SPEED in feet/sec. = 11.23

BOW ON TIME in sec = 119

STERN ON TIME in sec = 184

DISTANCE TO STAFF GAUGE from green side in feet = 50

BACKGROUND READING in inches = 29

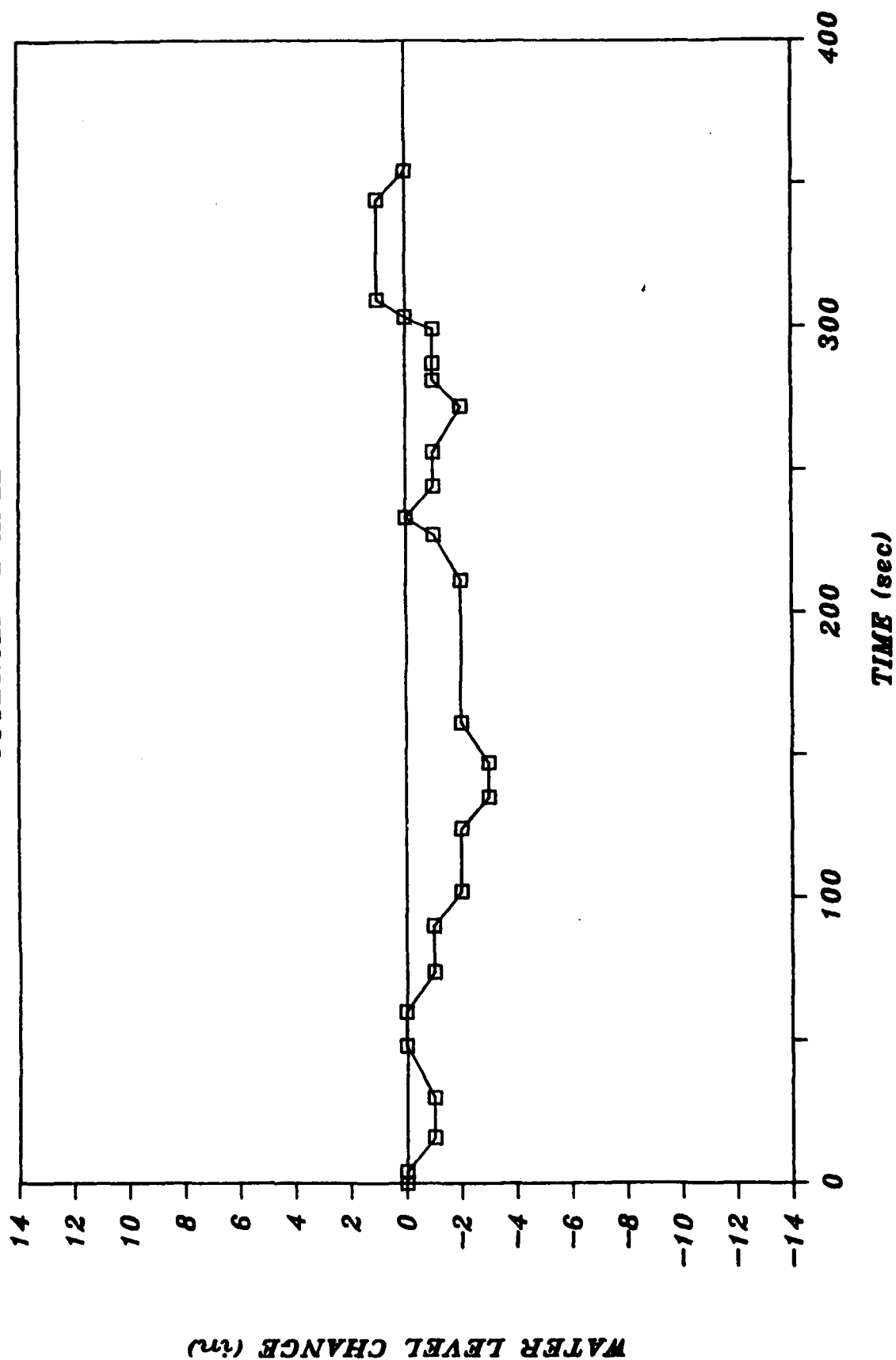
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	29.0	0.0
2	4.0	29.0	0.0
3	16.0	28.0	-1.0
4	30.0	28.0	-1.0
5	48.0	29.0	0.0
6	60.0	29.0	0.0
7	74.0	28.0	-1.0
8	90.0	28.0	-1.0
9	102.0	27.0	-2.0
10	124.0	27.0	-2.0
11	135.0	26.0	-3.0
12	147.0	26.0	-3.0
13	161.0	27.0	-2.0
14	211.0	27.0	-2.0
15	227.0	28.0	-1.0
16	233.0	29.0	0.0
17	244.0	28.0	-1.0
18	256.0	28.0	-1.0
19	272.0	27.0	-2.0
20	281.0	28.0	-1.0

DRAWDOWN DATA (continued)

NAME OF SECTION ISLAND VIEW

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	287.0	28.0	-1.0
22	299.0	29.0	0.0
23	303.0	29.0	0.0
24	309.0	30.0	1.0
25	344.0	30.0	1.0
26	354.0	29.0	0.0

ISLAND VIEW (green)
OTTERCLIFFE HALL

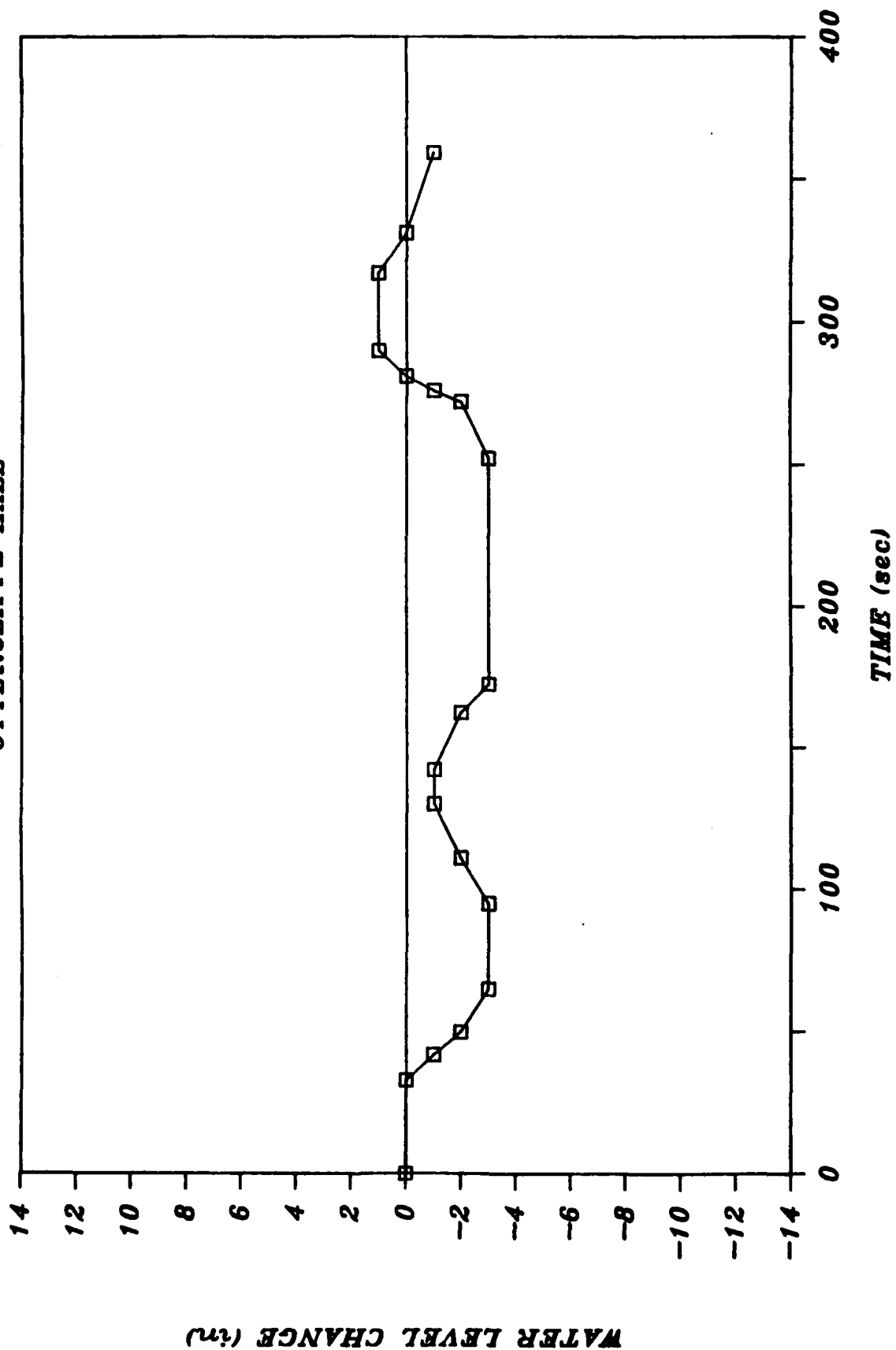


NAME OF SECTION	ISLAND VIEW

BACKGROUND READING in inches = 29

BC52

ISLAND VIEW (red)
OTTERCLIFFE HALL



DRAWDOWN DATA

NAME OF SECTION	ISLAND VIEW
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

DATE OF OBSERVATION 5/27/85

VESSEL NAME KINSMAN INDEPENDENT

DIRECTION	DOWNBOUND
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

VESSEL LENGTH in feet = 600

VESSEL BEAM in feet = 60

VESSEL DRAFT in feet = 21

VESSEL SPEED in feet/sec. = 12.0

BOW ON TIME in sec = 94

STERN ON TIME in sec = 144

DISTANCE TO STAFF GAUGE from green side in feet = 28

BACKGROUND READING in inches = 28

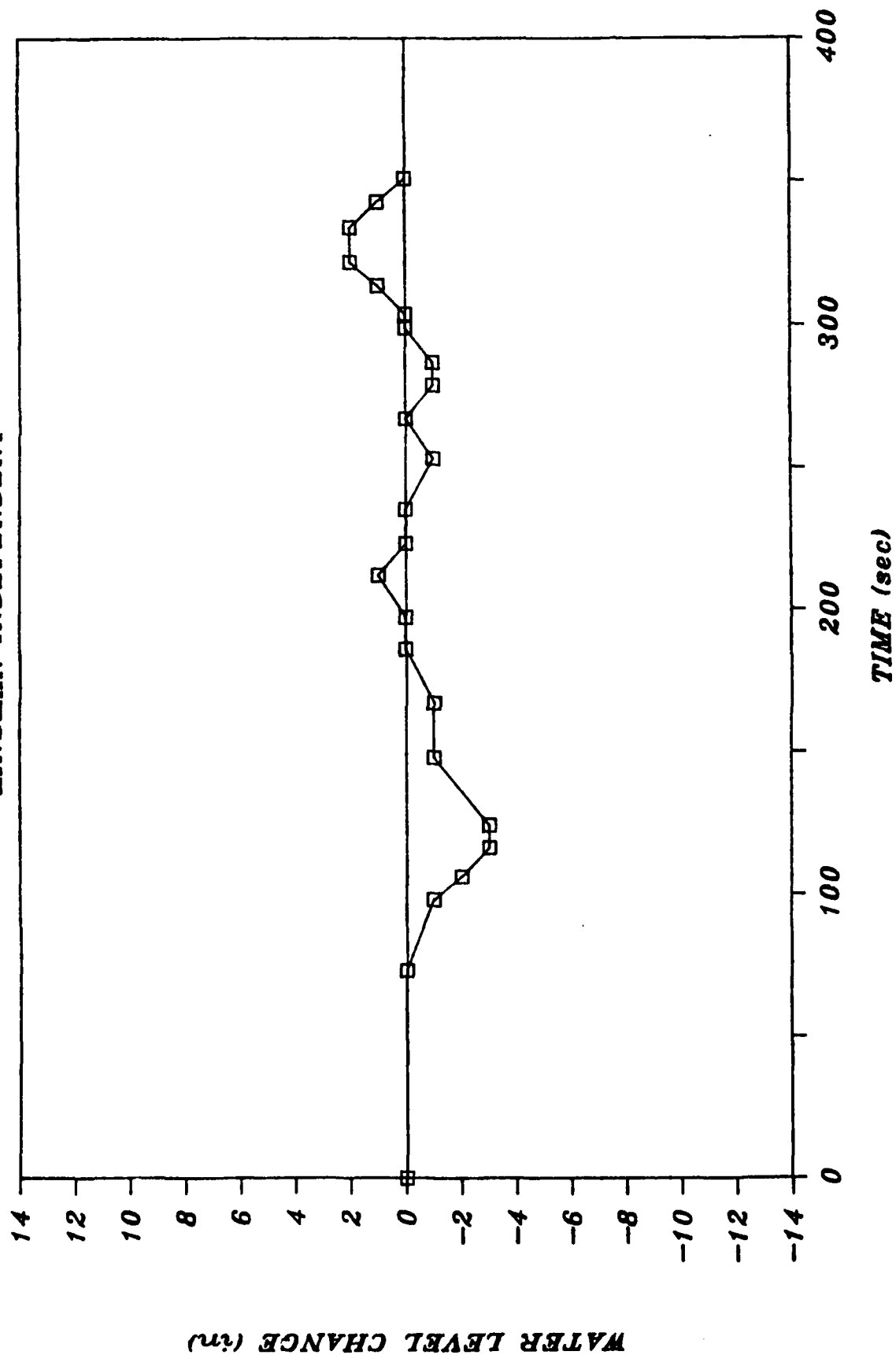
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	28.0	0.0
2	73.0	28.0	0.0
3	98.0	27.0	-1.0
4	106.0	26.0	-2.0
5	116.0	25.0	-3.0
6	124.0	25.0	-3.0
7	148.0	27.0	-1.0
8	167.0	27.0	-1.0
9	186.0	28.0	0.0
10	197.0	28.0	0.0
11	212.0	29.0	1.0
12	223.0	28.0	0.0
13	235.0	28.0	0.0
14	253.0	27.0	-1.0
15	267.0	28.0	0.0
16	279.0	27.0	-1.0
17	287.0	27.0	-1.0
18	299.0	28.0	0.0
19	304.0	28.0	0.0
20	314.0	29.0	1.0

[illegible]

BC55

ISLAND VIEW (green)

KINSMAN INDEPENDENT



DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW

DATE OF OBSERVATION 5/27/85

VESSEL NAME KINSMAN INDEPENDENT

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 600

VESSEL BEAM in feet = 60

VESSEL DRAFT in feet = 21

VESSEL SPEED in feet/sec. = 12

BOW ON TIME in sec = 93

STERN ON TIME in sec = 144

DISTANCE TO STAFF GAUGE from green side in feet = 2170

BACKGROUND READING in inches = 29

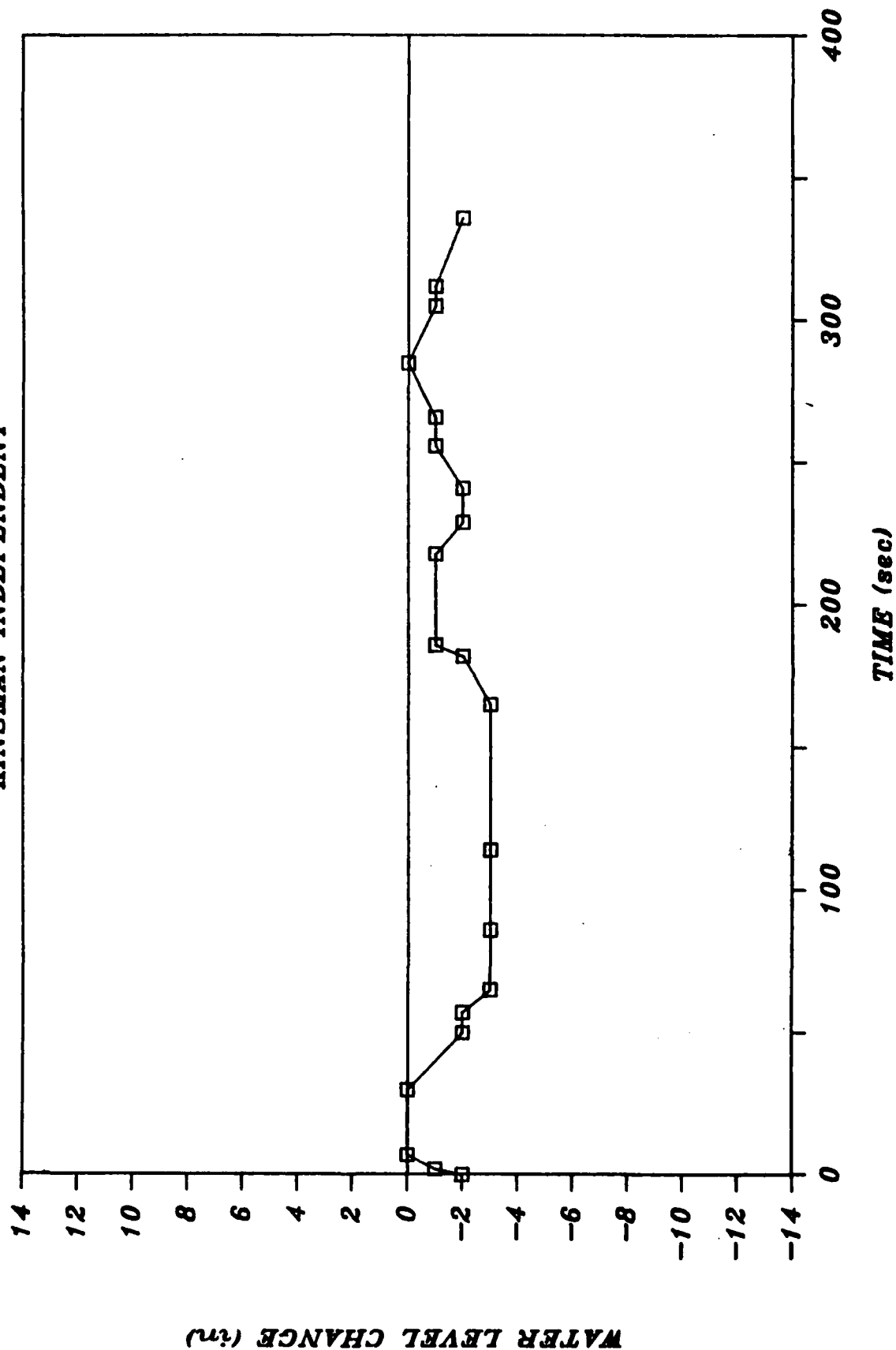
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	27.0	-2.0
2	2.0	28.0	-1.0
3	7.0	29.0	0.0
4	30.0	29.0	0.0
5	39.0	28.0	-1.0
6	50.0	27.0	-2.0
7	57.0	27.0	-2.0
8	65.0	26.0	-3.0
9	86.0	26.0	-3.0
10	114.0	26.0	-3.0
11	165.0	26.0	-3.0
12	182.0	27.0	-2.0
13	186.0	28.0	-1.0
14	218.0	28.0	-1.0
15	229.0	27.0	-2.0
16	241.0	27.0	-2.0
17	256.0	28.0	-1.0
18	266.0	28.0	-1.0
19	285.0	29.0	0.0
20	305.0	28.0	-1.0

DRAWDOWN DATA (continued)

NAME OF SECTION ISLAND VIEW

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	312.0	28.0	-1.0
22	336.0	27.0	-2.0

ISLAND VIEW (red)
KINSMAN INDEPENDENT



#####

DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW

#####

DATE OF OBSERVATION 5/27/85

VESSEL NAME RICHELIEU

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 26

VESSEL SPEED in feet/sec. = 12.37

BOW ON TIME in sec = 113

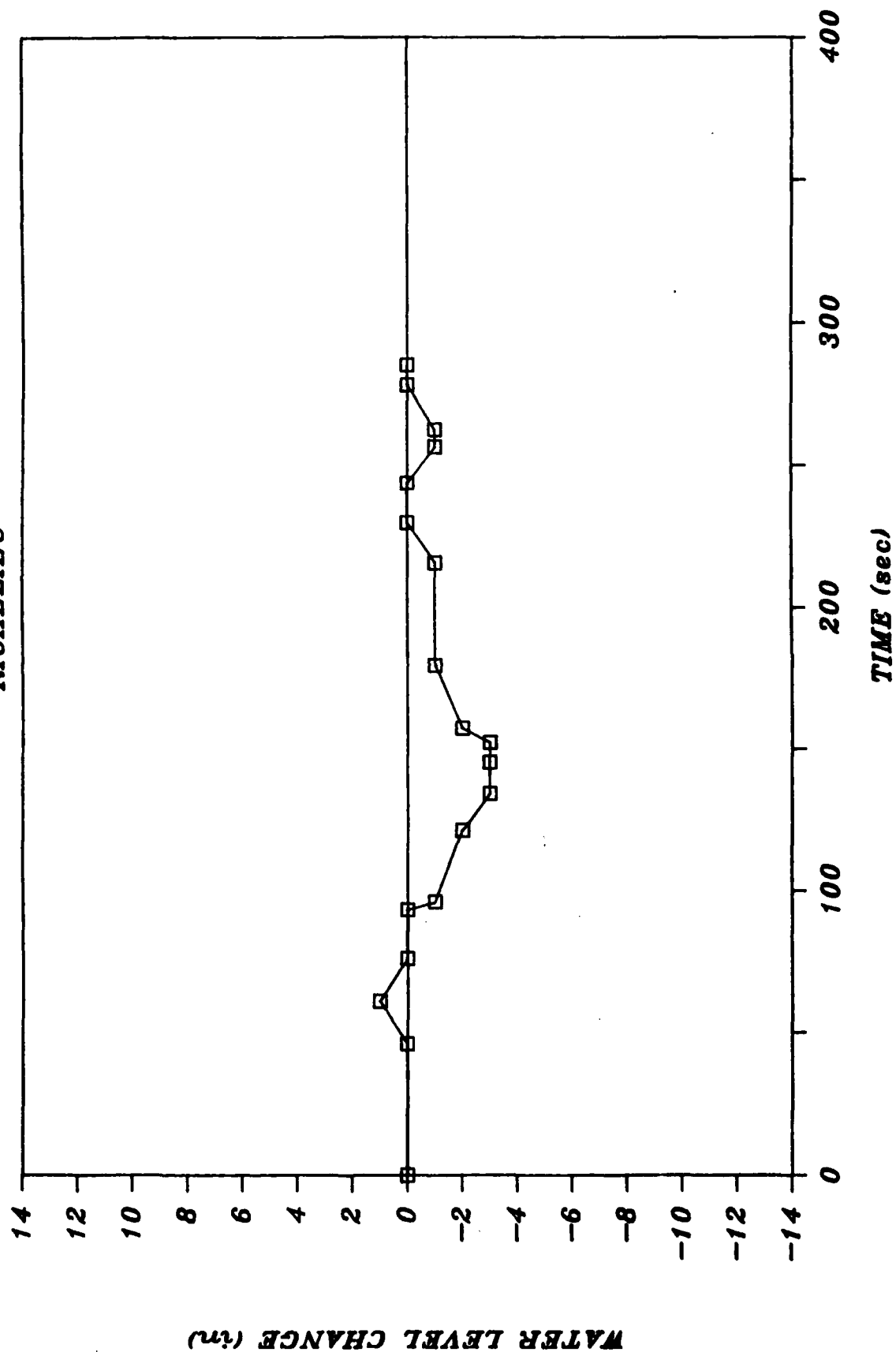
STERN ON TIME in sec = 172

DISTANCE TO STAFF GAUGE from green side in feet = 50

BACKGROUND READING in inches = 28

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	28.0	0.0
2	46.0	28.0	0.0
3	61.0	29.0	1.0
4	76.0	28.0	0.0
5	93.0	28.0	0.0
6	96.0	27.0	-1.0
7	121.0	26.0	-2.0
8	134.0	25.0	-3.0
9	145.0	25.0	-3.0
10	152.0	25.0	-3.0
11	157.0	26.0	-2.0
12	179.0	27.0	-1.0
13	215.0	27.0	-1.0
14	229.0	28.0	0.0
15	243.0	28.0	0.0
16	256.0	27.0	-1.0
17	262.0	27.0	-1.0
18	278.0	28.0	0.0
19	285.0	28.0	0.0

ISLAND VIEW (green)
RICHELIEU



DRAWDOWN DATA

NAME OF SECTION	ISLAND VIEW
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

DATE OF OBSERVATION 5/27/85

VESSEL NAME **RICHELIEU**

DIRECTION	DOWNBOUND
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 26

VESSEL SPEED in feet/sec. = 12.37

BOW ON TIME in sec = 113

STERN ON TIME in sec = 172

DISTANCE TO STAFF GAUGE from green side in feet = 2170

BACKGROUND READING in inches = 29

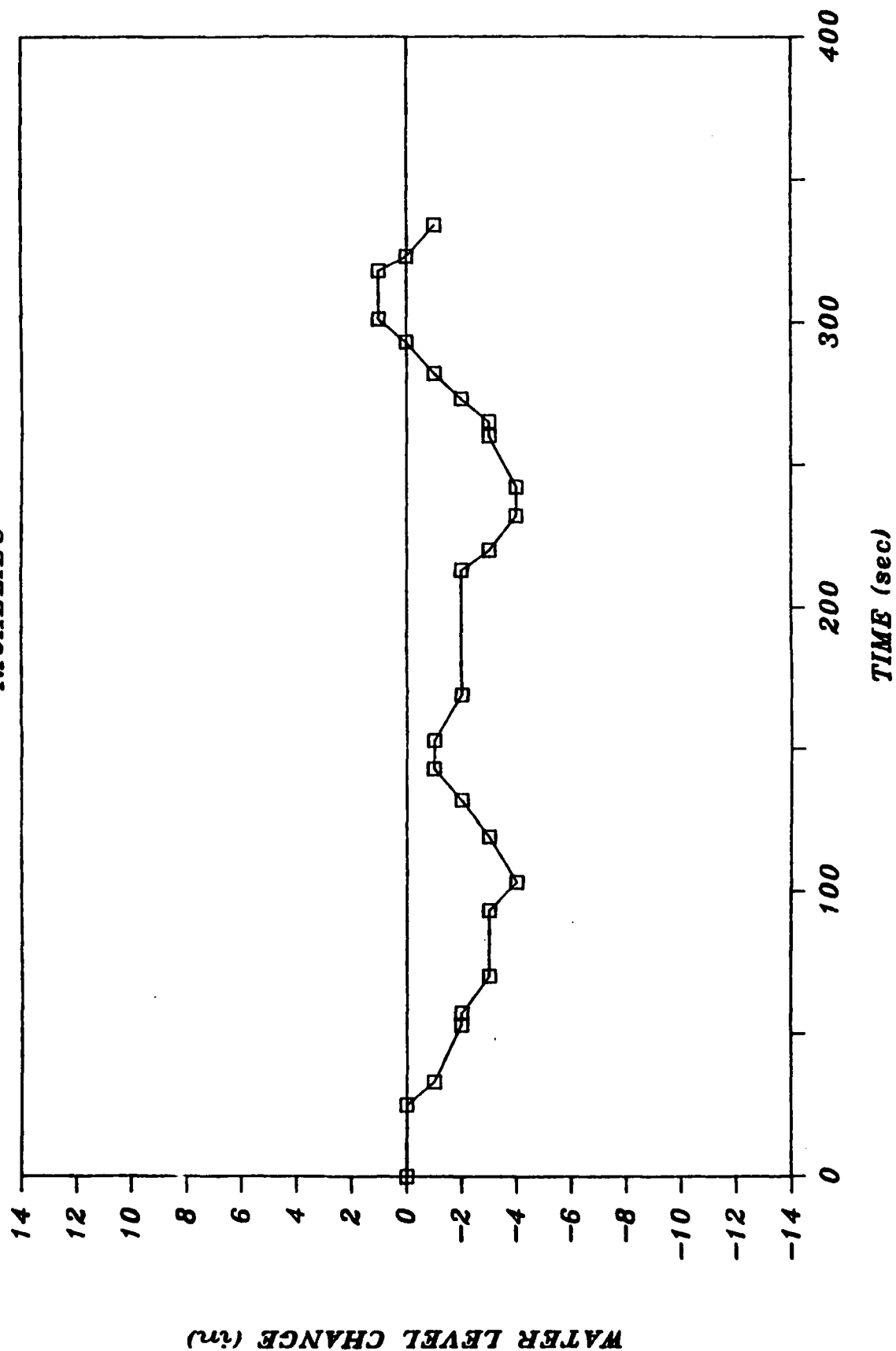
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	29.0	0.0
2	25.0	29.0	0.0
3	33.0	28.0	-1.0
4	53.0	27.0	-2.0
5	57.0	27.0	-2.0
6	70.0	26.0	-3.0
7	93.0	26.0	-3.0
8	103.0	25.0	-4.0
9	119.0	26.0	-3.0
10	132.0	27.0	-2.0
11	143.0	28.0	-1.0
12	153.0	28.0	-1.0
13	169.0	27.0	-2.0
14	213.0	27.0	-2.0
15	220.0	26.0	-3.0
16	232.0	25.0	-4.0
17	242.0	25.0	-4.0
18	260.0	26.0	-3.0
19	265.0	26.0	-3.0
20	273.0	27.0	-2.0

DRAWDOWN DATA (continued)

NAME OF SECTION ISLAND VIEW

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	282.0	28.0	-1.0
22	293.0	29.0	0.0
23	301.0	30.0	1.0
24	318.0	30.0	1.0
25	323.0	29.0	0.0
26	334.0	28.0	-1.0

ISLAND VIEW (red)
RICHELIEU



DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW
#####

DATE OF OBSERVATION 5/28/85

VESSEL NAME EDGAR B. SPEER

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 1004

VESSEL BEAM in feet = 105

VESSEL DRAFT in feet = 27.5

VESSEL SPEED in feet/sec. = 9.65

BOW ON TIME in sec = 108

STERN ON TIME in sec = 210

DISTANCE TO STAFF GAUGE from green side in feet = 50

BACKGROUND READING in inches = 26

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	26.0	0.0
2	16.0	25.0	-1.0
3	31.0	25.0	-1.0
4	46.0	25.0	-1.0
5	58.0	24.0	-2.0
6	71.0	23.0	-3.0
7	92.0	22.0	-4.0
8	108.0	22.0	-4.0
9	120.0	22.0	-4.0
10	132.0	23.0	-3.0
11	172.0	23.0	-3.0
12	185.0	22.0	-4.0
13	196.0	22.0	-4.0
14	205.0	23.0	-3.0
15	218.0	24.0	-2.0
16	228.0	24.0	-2.0
17	251.0	25.0	-1.0
18	258.0	25.0	-1.0
19	273.0	26.0	0.0
20	288.0	26.0	0.0

#####

DRAWDOWN DATA (continued)

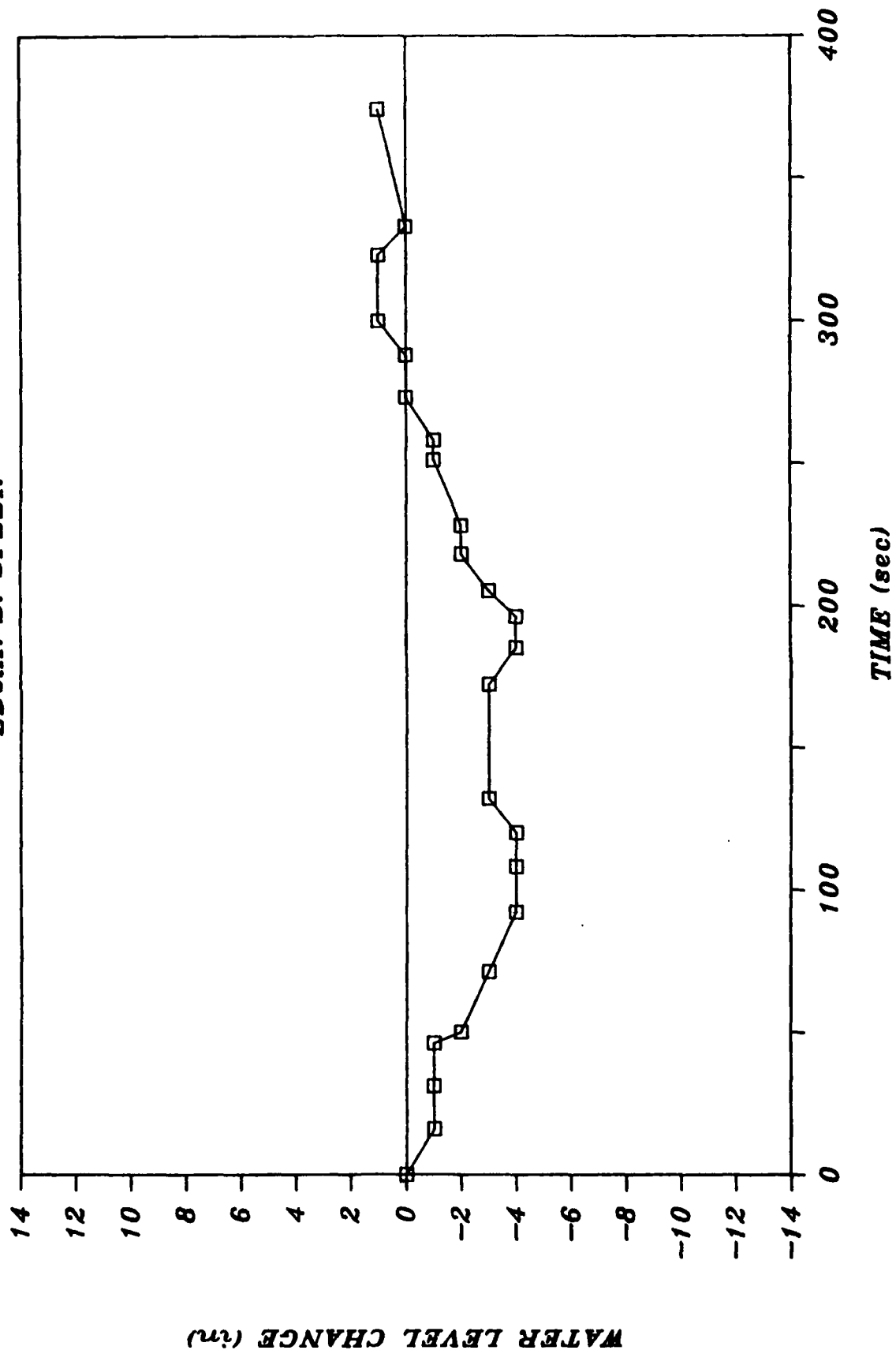
NAME OF SECTION ISLAND VIEW

#####

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	300.0	27.0	1.0
22	323.0	27.0	1.0
23	333.0	26.0	0.0
24	374.0	26.0	0.0

ISLAND VIEW (green)

EDGAR B. SPEER



@@
 DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW
 @@

DATE OF OBSERVATION 5/28/85
 VESSEL NAME EDGAR B. SPEER
 DIRECTION DOWNBOUND
 VESSEL LENGTH in feet = 1004
 VESSEL BEAM in feet = 105
 VESSEL DRAFT in feet = 27.5
 VESSEL SPEED in feet/sec. = 9.65
 BOW ON TIME in sec = 106
 STERN ON TIME in sec = 210
 DISTANCE TO STAFF GAUGE from green side in feet = 2170
 BACKGROUND READING in inches = 29

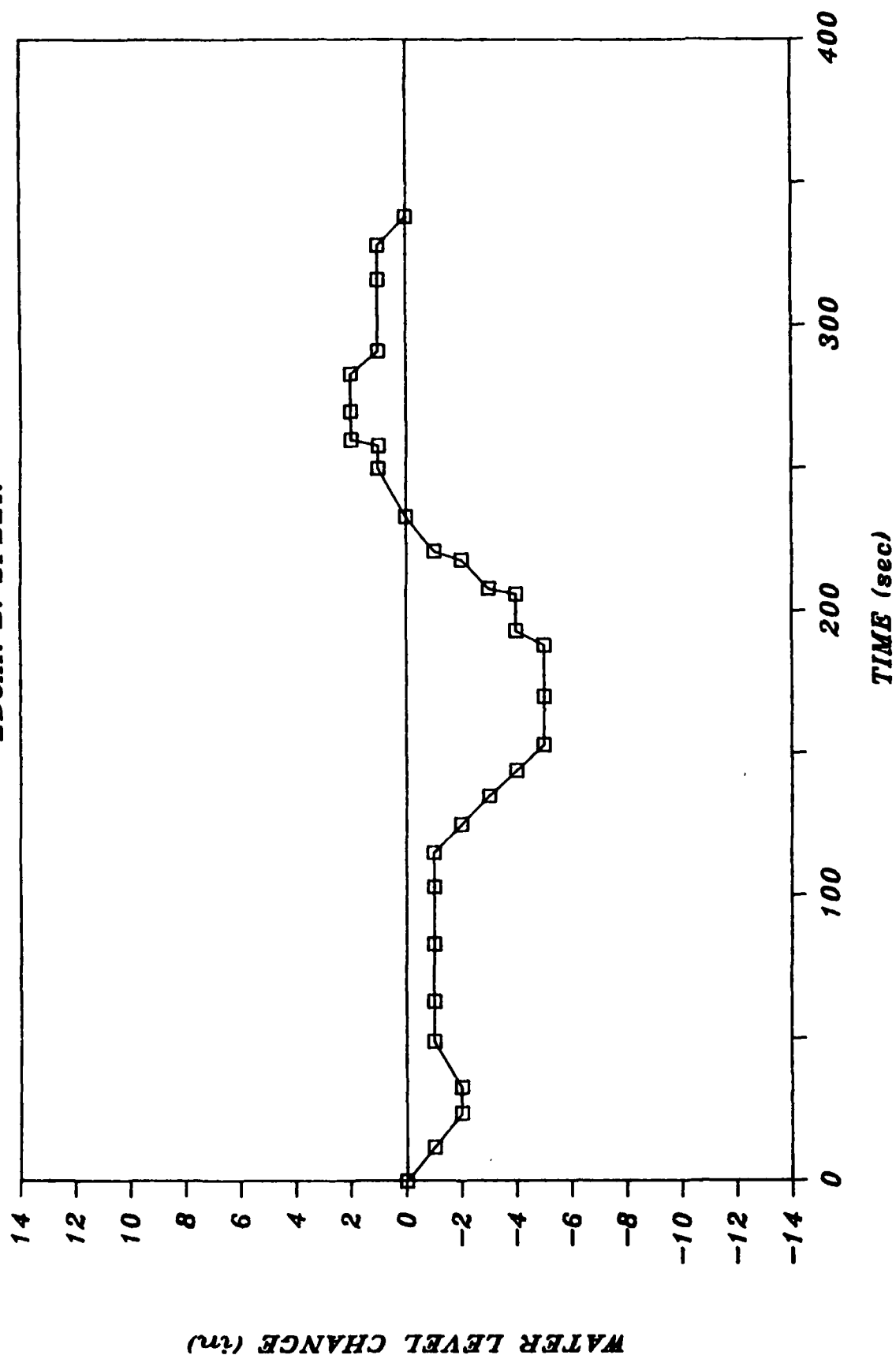
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	29.0	0.0
2	12.0	28.0	-1.0
3	24.0	27.0	-2.0
4	33.0	27.0	-2.0
5	49.0	28.0	-1.0
6	53.0	28.0	-1.0
7	83.0	28.0	-1.0
8	103.0	28.0	-1.0
9	115.0	28.0	-1.0
10	125.0	27.0	-2.0
11	135.0	26.0	-3.0
12	144.0	25.0	-4.0
13	153.0	24.0	-5.0
14	170.0	24.0	-5.0
15	188.0	24.0	-5.0
16	193.0	25.0	-4.0
17	206.0	25.0	-4.0
18	208.0	26.0	-3.0
19	218.0	27.0	-2.0
20	221.0	28.0	-1.0

NAME OF SECTION	ISLAND VIEW
<div></div> <div>=====</div>	

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	233.0	29.0	0.0
22	250.0	30.0	1.0
23	258.0	30.0	1.0
24	260.0	31.0	2.0
25	270.0	31.0	2.0
26	283.0	31.0	2.0
27	291.0	30.0	1.0
28	316.0	30.0	1.0
29	328.0	30.0	1.0
30	338.0	29.0	0.0

ISLAND VIEW (red)

EDGAR B. SPEER



DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW
#####

DATE OF OBSERVATION 5/28/85

VESSEL NAME V. W. SCULLY

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 26

VESSEL SPEED in feet/sec. = 9.36

BOW ON TIME in sec = 75

STERN ON TIME in sec = 133

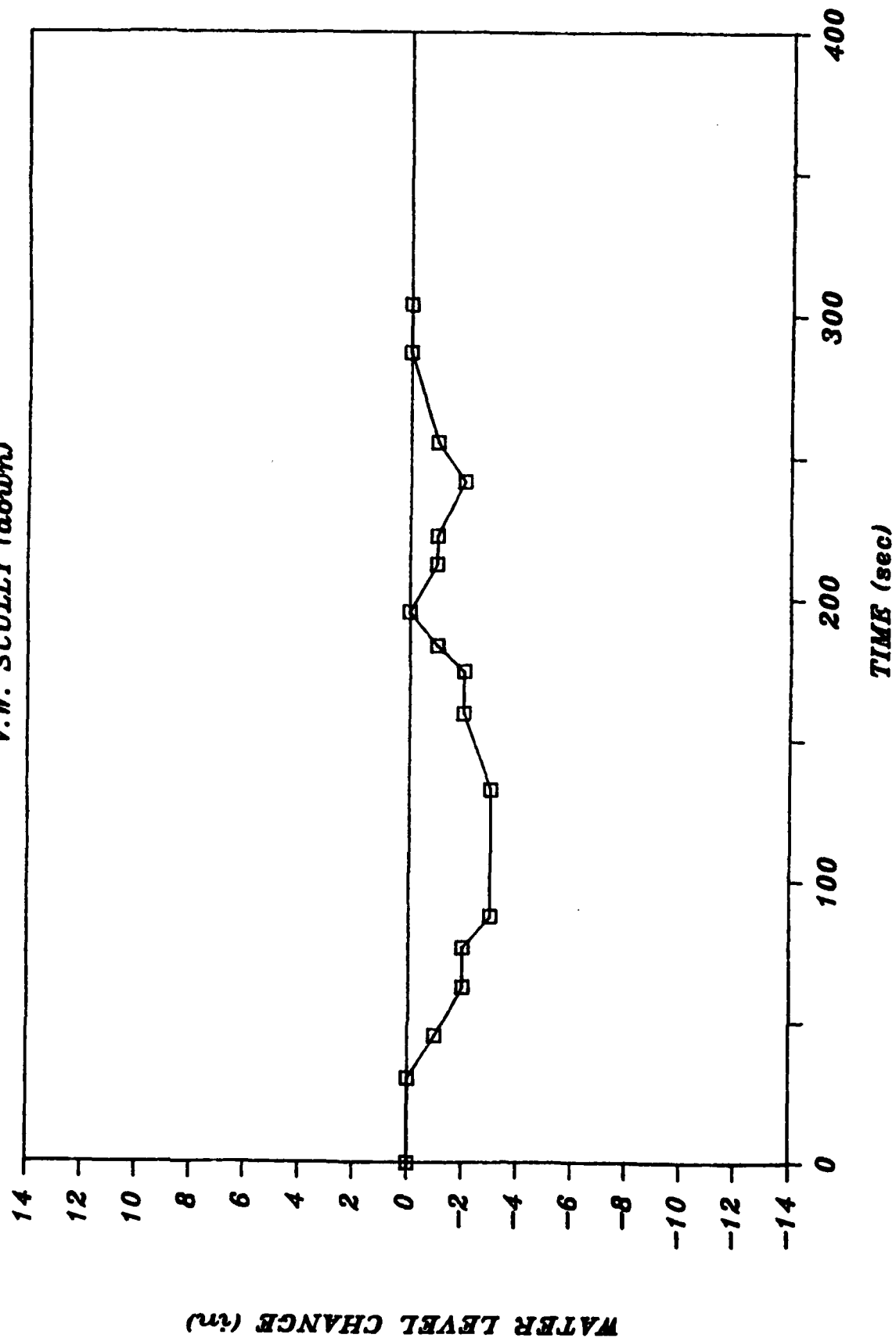
DISTANCE TO STAFF GAUGE from green side in feet = 50

BACKGROUND READING in inches = 26

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	26.0	0.0
2	30.0	26.0	0.0
3	45.0	25.0	-1.0
4	62.0	24.0	-2.0
5	76.0	24.0	-2.0
6	87.0	23.0	-3.0
7	132.0	23.0	-3.0
8	159.0	24.0	-2.0
9	174.0	24.0	-2.0
10	183.0	25.0	-1.0
11	195.0	26.0	0.0
12	212.0	25.0	-1.0
13	222.0	25.0	-1.0
14	241.0	24.0	-2.0
15	255.0	25.0	-1.0
16	287.0	26.0	0.0
17	304.0	26.0	0.0

ISLAND VIEW (green)

V.W. SCULLY (down)



 DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW

DATE OF OBSERVATION 5/28/85
 VESSEL NAME V. W. SCULLY
 DIRECTION DOWNBOUND
 VESSEL LENGTH in feet = 730
 VESSEL BEAM in feet = 75
 VESSEL DRAFT in feet = 26
 VESSEL SPEED in feet/sec. = 9.36
 BOW ON TIME in sec = 75
 STERN ON TIME in sec = 133
 DISTANCE TO STAFF GAUGE from green side in feet = 2170
 BACKGROUND READING in inches = 29

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	29.0	0.0
2	12.0	28.0	-1.0
3	27.0	27.0	-2.0
4	39.0	27.0	-2.0
5	46.0	26.0	-3.0
6	65.0	26.0	-3.0
7	77.0	27.0	-2.0
8	106.0	28.0	-1.0
9	120.0	28.0	-1.0
10	131.0	27.0	-2.0
11	151.0	27.0	-2.0
12	164.0	28.0	-1.0
13	181.0	27.0	-2.0
14	189.0	26.0	-3.0
15	202.0	26.0	-3.0
16	212.0	26.0	-3.0
17	223.0	27.0	-2.0
18	227.0	28.0	-1.0
19	234.0	29.0	0.0
20	247.0	29.0	0.0

oo

DRAWDOWN DATA (continued)

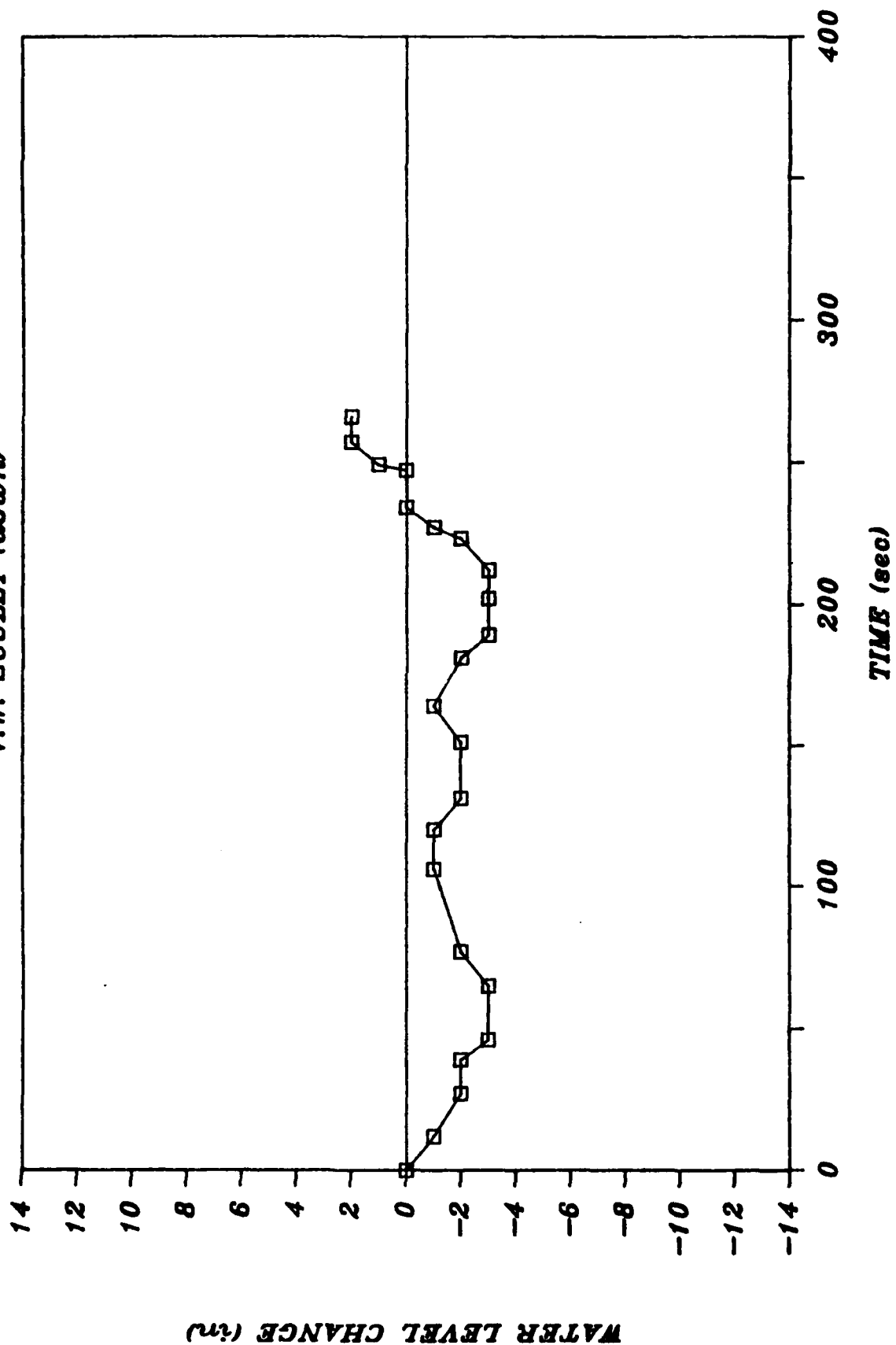
NAME OF SECTION ISLAND VIEW

oo

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	249.0	30.0	1.0
22	257.0	31.0	2.0
23	266.0	31.0	2.0

ISLAND VIEW (red)

V.W. SCULLY (down)



[illegible]

BACKGROUND READING in inches = 26

BC76

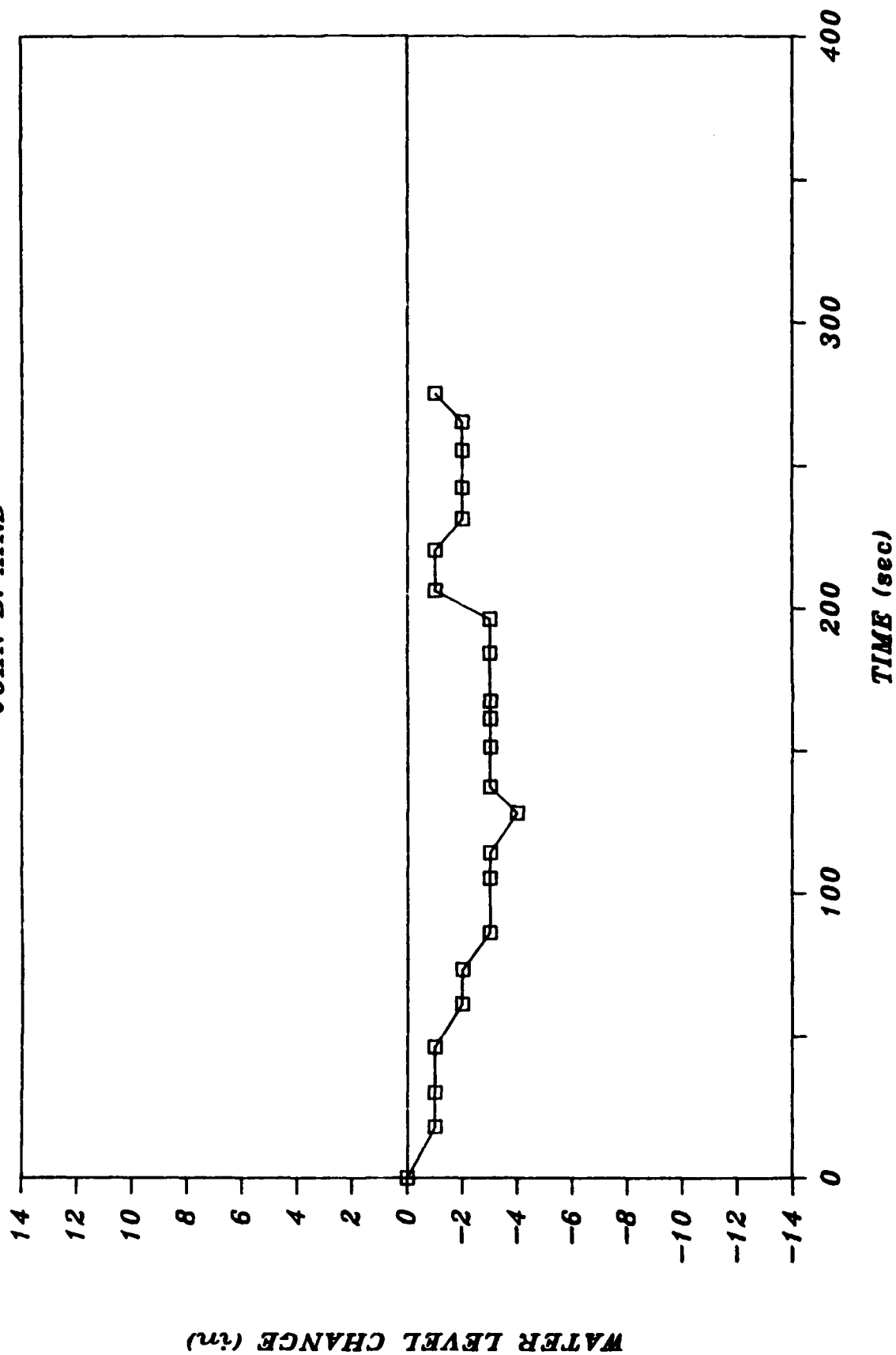
DRAWDOWN DATA (continued)

NAME OF SECTION	ISLAND VIEW
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	255.0	24.0	-2.0
22	265.0	24.0	-2.0
23	275.0	25.0	-1.0
24	282.0	26.0	0.0
25	303.0	26.0	0.0
26	317.0	26.0	0.0
27	332.0	26.0	0.0
28	338.0	26.0	0.0

ISLAND VIEW (green)

JOHN B. AIRD



DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW

DATE OF OBSERVATION 5/28/85

VESSEL NAME JOHN B. AIRD

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75.8

VESSEL DRAFT in feet = 26

VESSEL SPEED in feet/sec. = 11.41

BOW ON TIME in sec = 101

STERN ON TIME in sec = 165

DISTANCE TO STAFF GAUGE from green side in feet = 2170

BACKGROUND READING in inches = 29

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	29.0	0.0
2	31.0	28.0	-1.0
3	39.0	27.0	-2.0
4	49.0	26.0	-3.0
5	60.0	26.0	-3.0
6	65.0	26.0	-3.0
7	91.0	27.0	-2.0
8	109.0	27.0	-2.0
9	124.0	27.0	-2.0
10	138.0	27.0	-2.0
11	149.0	26.0	-3.0
12	165.0	26.0	-3.0
13	182.0	27.0	-2.0
14	199.0	27.0	-2.0
15	213.0	26.0	-3.0
16	226.0	26.0	-3.0
17	240.0	27.0	-2.0
18	253.0	28.0	-1.0
19	262.0	29.0	0.0
20	272.0	30.0	1.0

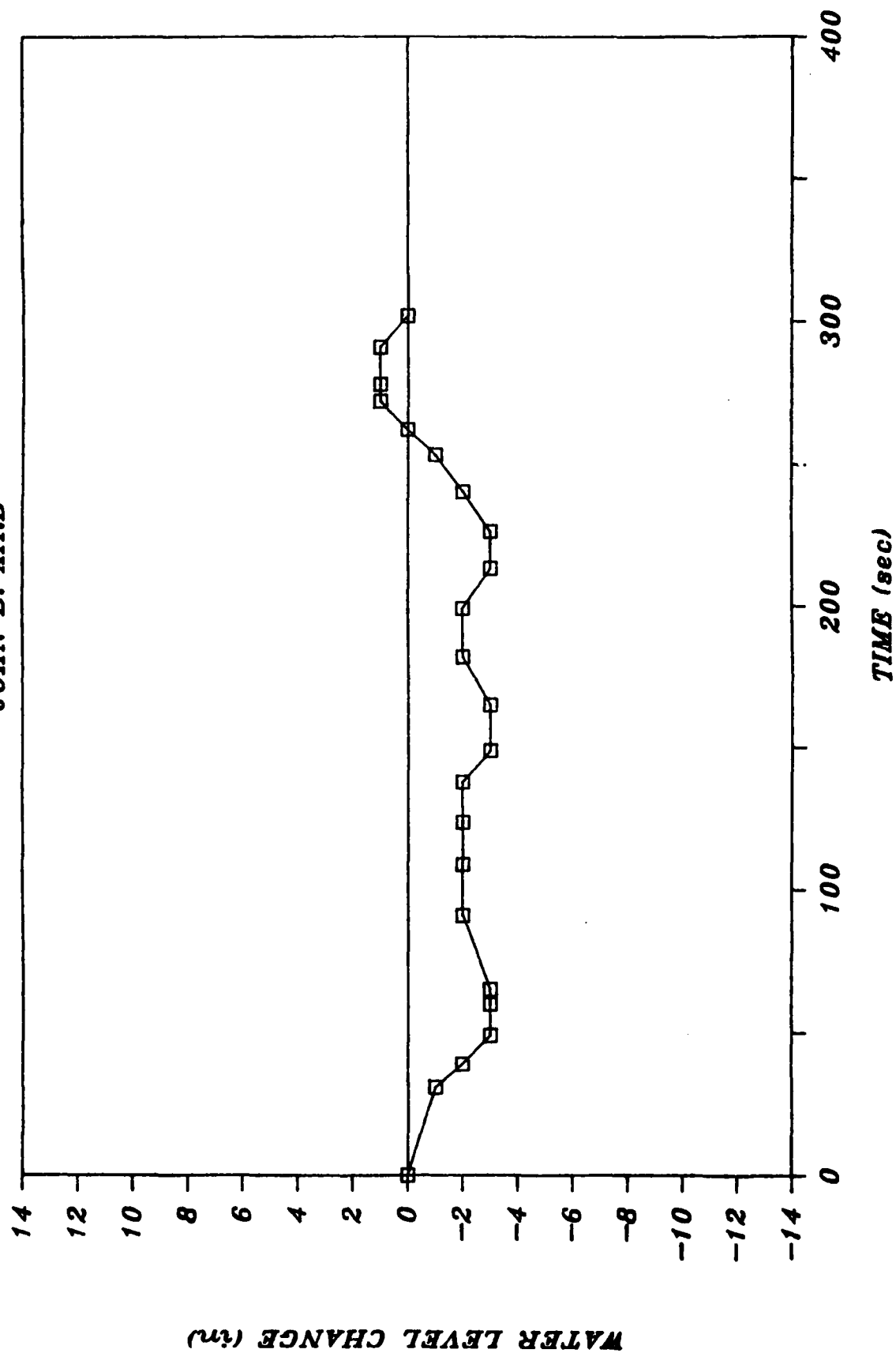
DRAWDOWN DATA (continued)

[illegible]

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	278.0	30.0	1.0
22	291.0	30.0	1.0
23	302.0	29.0	0.0

ISLAND VIEW (red)

JOHN B. AIRD



DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW
#####

DATE OF OBSERVATION 5/29/85

VESSEL NAME CANADOC

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 605

VESSEL BEAM in feet = 62

VESSEL DRAFT in feet = 24

VESSEL SPEED in feet/sec. = 12.54

BOW ON TIME in sec = 74

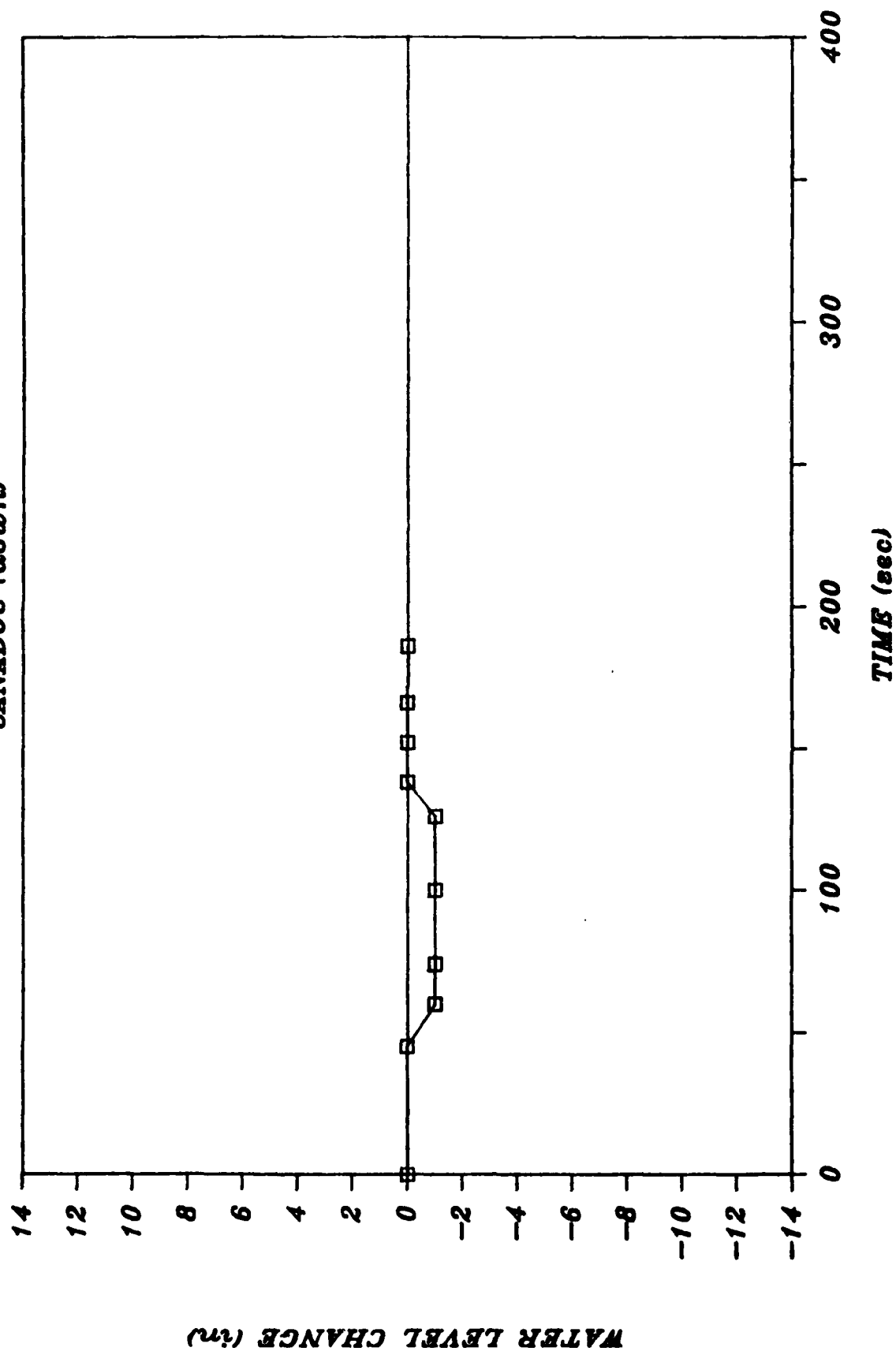
STERN ON TIME in sec = 122

DISTANCE TO STAFF GAUGE from green side in feet = 50

BACKGROUND READING in inches = 29

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	29.0	0.0
2	45.0	29.0	0.0
3	60.0	28.0	-1.0
4	74.0	28.0	-1.0
5	100.0	28.0	-1.0
6	126.0	28.0	-1.0
7	138.0	29.0	0.0
8	152.0	29.0	0.0
9	166.0	29.0	0.0
10	186.0	29.0	0.0

ISLAND VIEW (green) CANADOC (down)



oo

DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW

oo

DATE OF OBSERVATION 5/29/85

VESSEL NAME CANADOC

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 605

VESSEL BEAM in feet = 62

VESSEL DRAFT in feet = 24

VESSEL SPEED in feet/sec. = 12.54

BOW ON TIME in sec = 74

STERN ON TIME in sec = 122

DISTANCE TO STAFF GAUGE from green side in feet = 2170

BACKGROUND READING in inches = 26

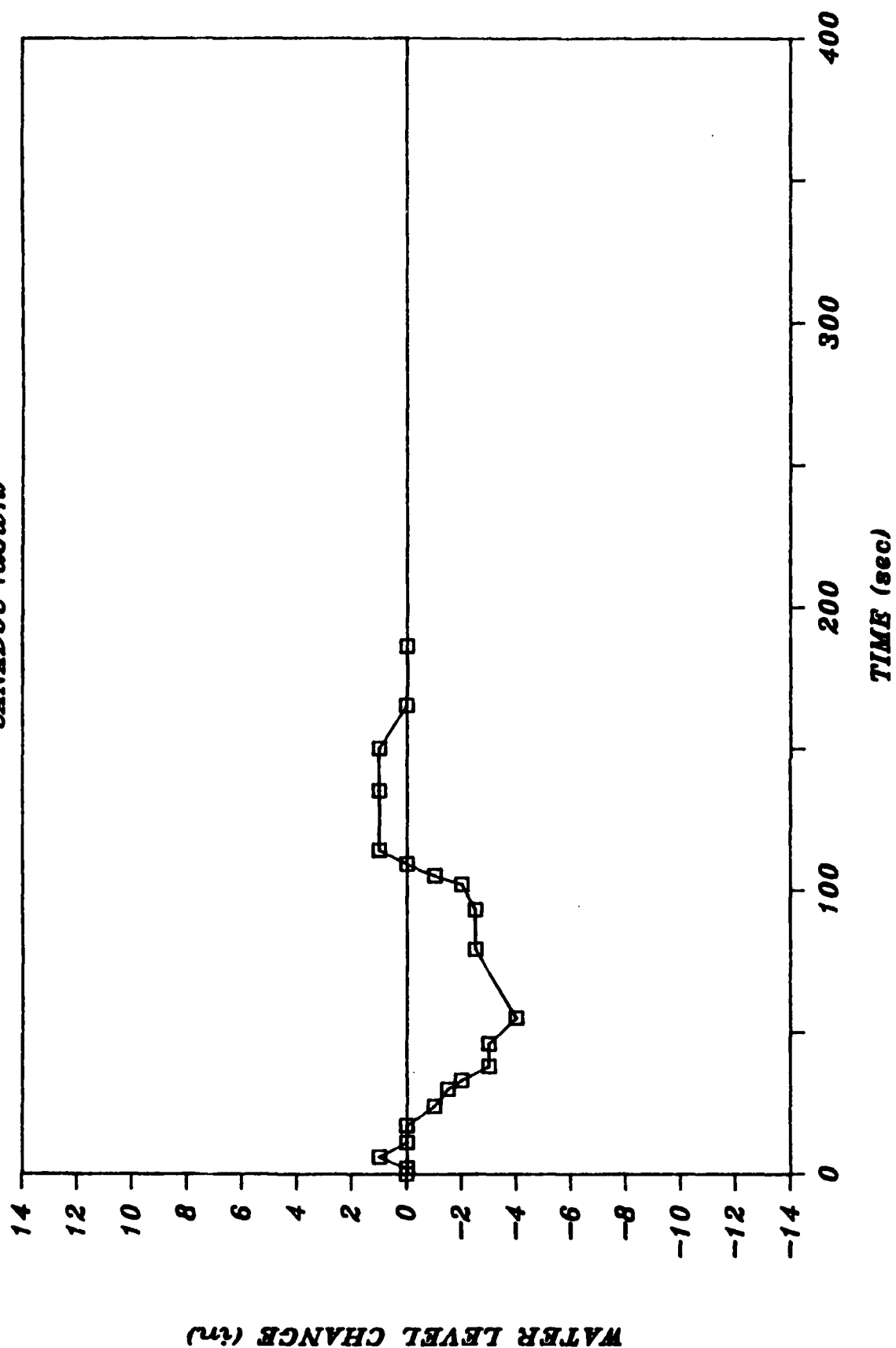
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	26.0	0.0
2	2.0	26.0	0.0
3	6.0	27.0	1.0
4	11.0	26.0	0.0
5	17.0	26.0	0.0
6	24.0	25.0	-1.0
7	30.0	24.5	-1.5
8	33.0	24.0	-2.0
9	38.0	23.0	-3.0
10	46.0	23.0	-3.0
11	55.0	22.0	-4.0
12	79.0	23.5	-2.5
13	93.0	23.5	-2.5
14	102.0	24.0	-2.0
15	105.0	25.0	-1.0
16	109.0	26.0	0.0
17	114.0	27.0	1.0
18	135.0	27.0	1.0
19	150.0	27.0	1.0
20	165.0	26.0	0.0

DRAWDOWN DATA (continued)

NAME OF SECTION ISLAND VIEW

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	186.0	26.0	0.0

ISLAND VIEW (red) CANADOC (down)



DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW
#####

DATE OF OBSERVATION 5/29/85

VESSEL NAME MANTADOC

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 605

VESSEL BEAM in feet = 62

VESSEL DRAFT in feet = 26

VESSEL SPEED in feet/sec. = 13.15

BOW ON TIME in sec = 46

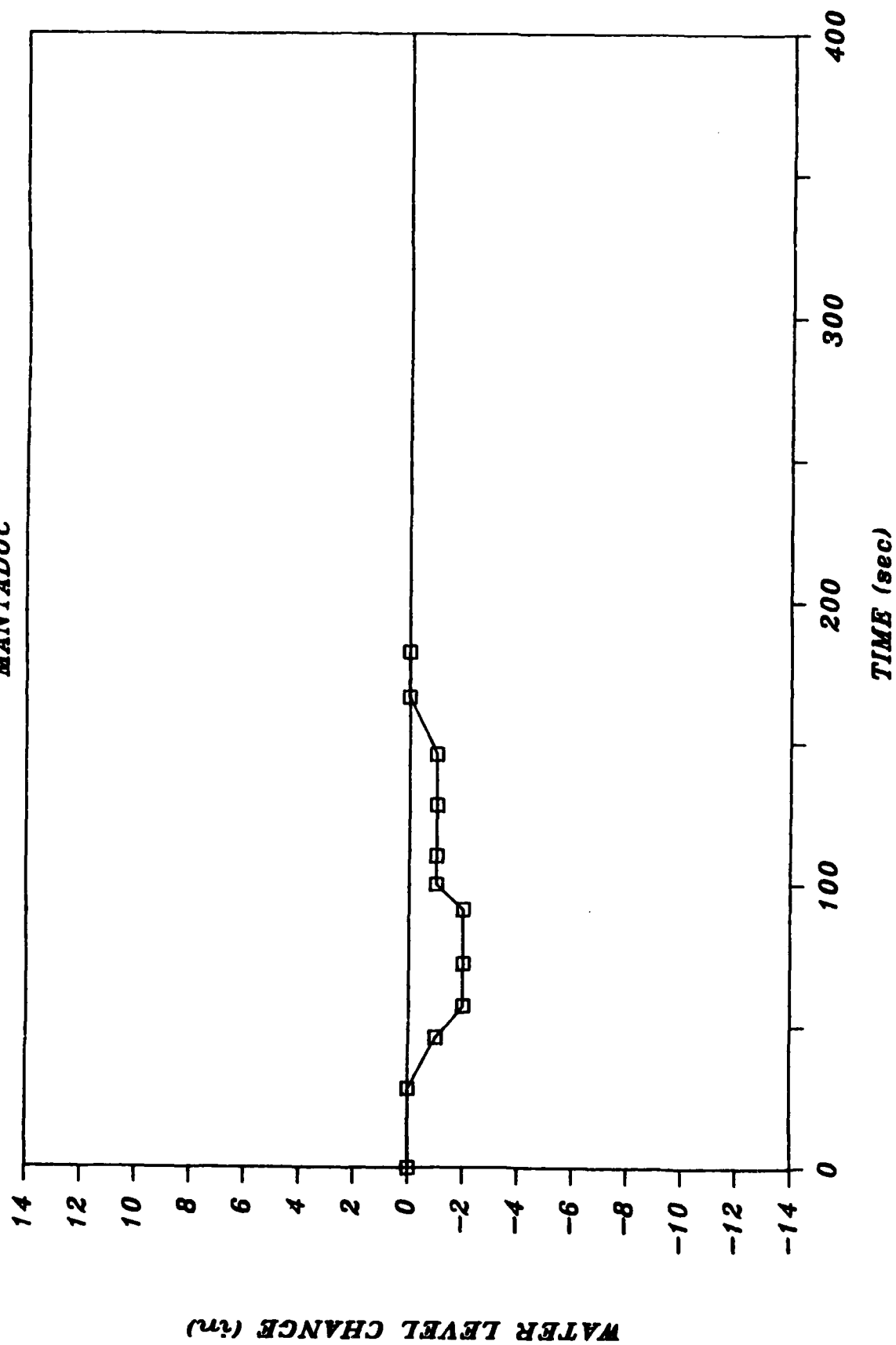
STERN ON TIME in sec = 92

DISTANCE TO STAFF GAUGE from green side in feet = 50

BACKGROUND READING in inches = 31

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	31.0	0.0
2	28.0	31.0	0.0
3	46.0	30.0	-1.0
4	57.0	29.0	-2.0
5	72.0	29.0	-2.0
6	91.0	29.0	-2.0
7	100.0	30.0	-1.0
8	110.0	30.0	-1.0
9	128.0	30.0	-1.0
10	146.0	30.0	-1.0
11	166.0	31.0	0.0
12	182.0	31.0	0.0

ISLAND VIEW (green)
MANTADOC



DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW

DATE OF OBSERVATION 5/29/85

VESSEL NAME MANTADOC

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 605

VESSEL BEAM in feet = 62

VESSEL DRAFT in feet = 26

VESSEL SPEED in feet/sec. = 13.15

BOW ON TIME in sec = 46

STERN ON TIME in sec = 92

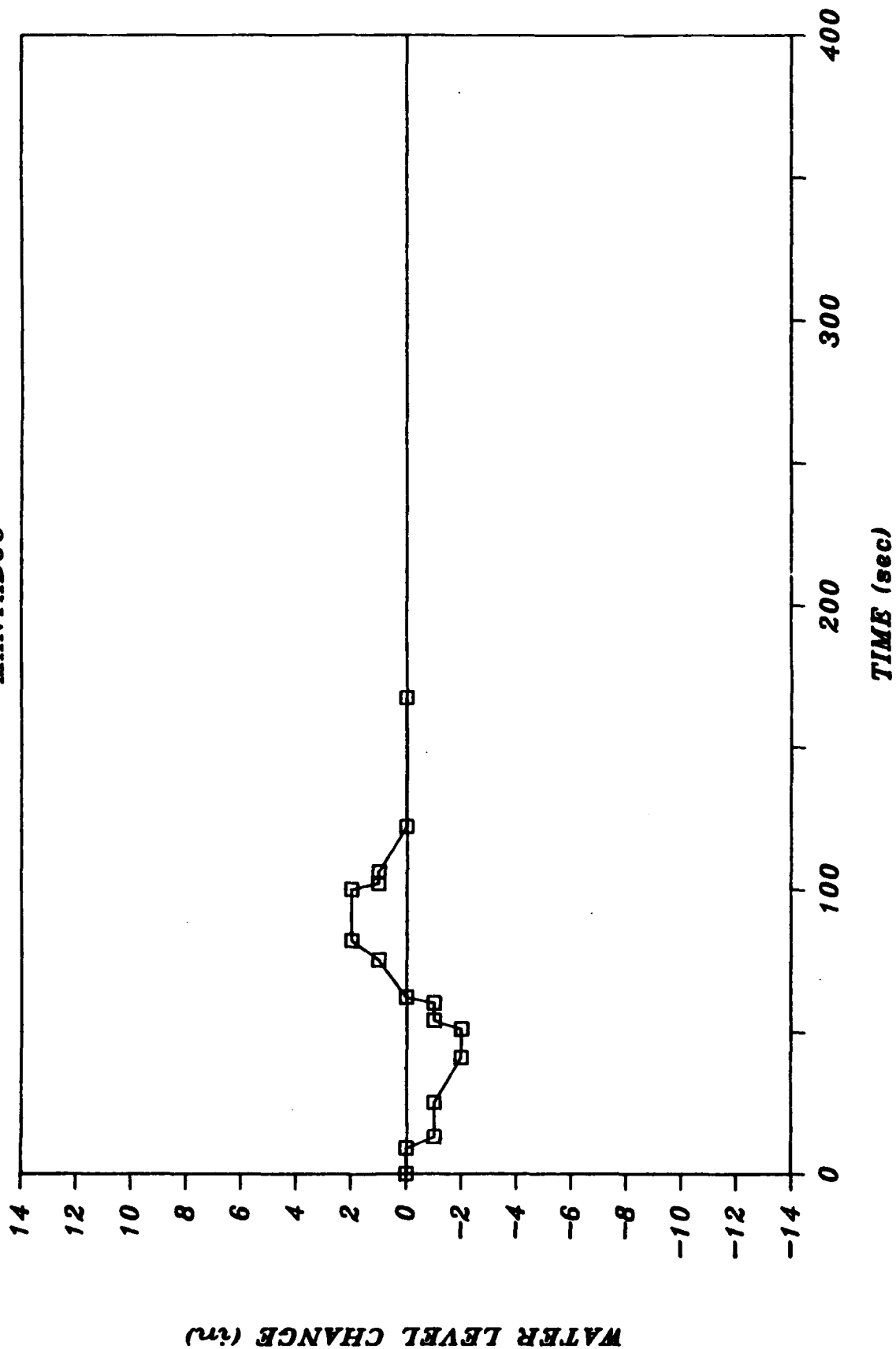
DISTANCE TO STAFF GAUGE from green side in feet = 2170

BACKGROUND READING in inches = 26

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	26.0	0.0
2	9.0	13.0	-13.0
3	13.0	25.0	-1.0
4	25.0	25.0	-1.0
5	41.0	24.0	-2.0
6	51.0	24.0	-2.0
7	54.0	25.0	-1.0
8	60.0	25.0	-1.0
9	62.0	26.0	0.0
10	75.0	27.0	1.0
11	82.0	28.0	2.0
12	100.0	28.0	2.0
13	102.0	27.0	1.0
14	106.0	27.0	1.0
15	122.0	26.0	0.0
16	167.0	26.0	0.0

ISLAND VIEW (red)

MANTADOC



DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW

DATE OF OBSERVATION 5/29/85

VESSEL NAME SPARROWS POINT

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 699

VESSEL BEAM in feet = 70

VESSEL DRAFT in feet = 27

VESSEL SPEED in feet/sec. = 12.71

BOW ON TIME in sec = 43

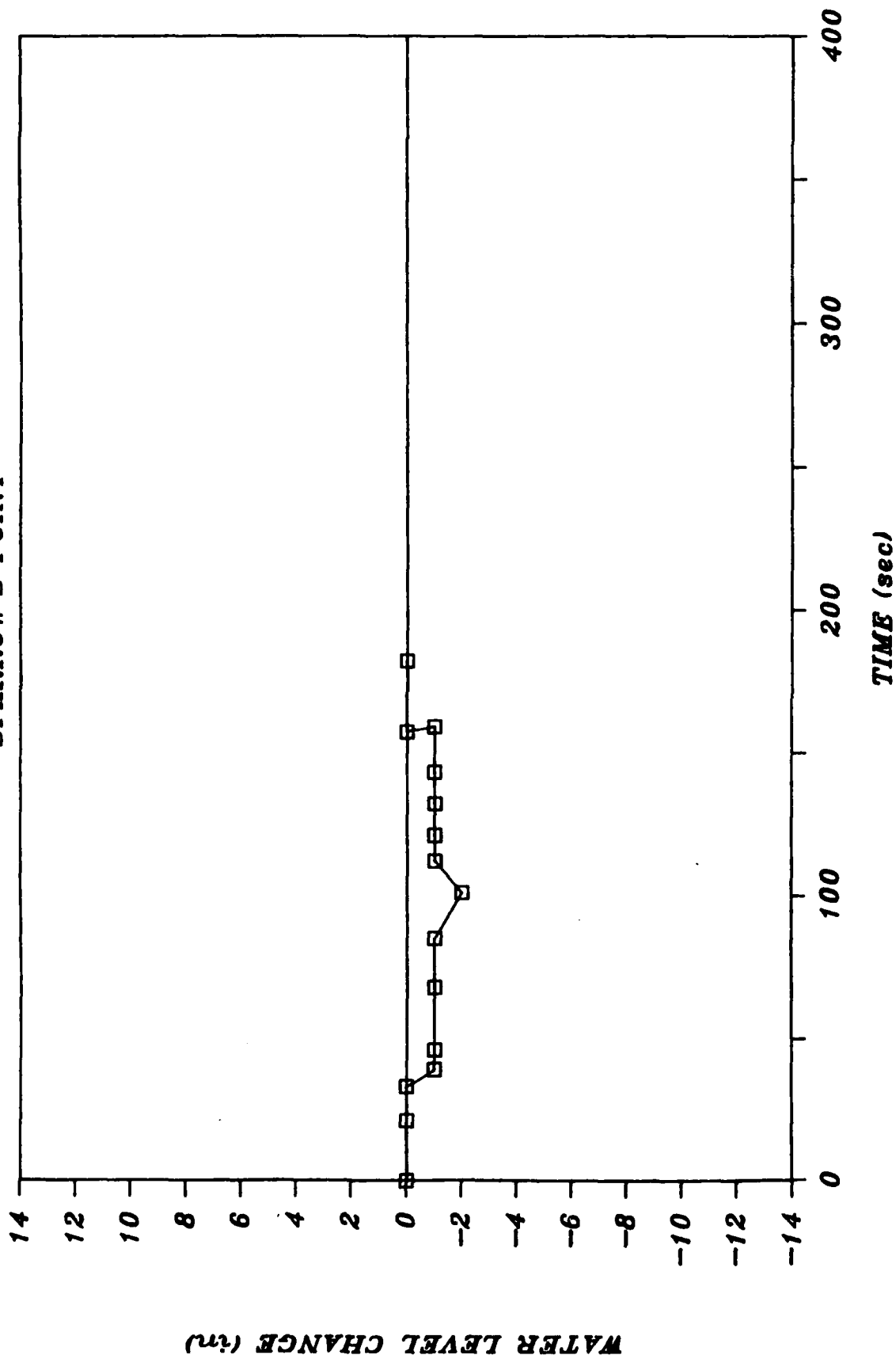
STERN ON TIME in sec = 98

DISTANCE TO STAFF GAUGE from green side in feet = 50

BACKGROUND READING in inches = 28

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	28.0	0.0
2	21.0	28.0	0.0
3	33.0	28.0	0.0
4	39.0	27.0	-1.0
5	46.0	27.0	-1.0
6	68.0	27.0	-1.0
7	85.0	27.0	-1.0
8	101.0	26.0	-2.0
9	112.0	27.0	-1.0
10	121.0	27.0	-1.0
11	132.0	27.0	-1.0
12	143.0	27.0	-1.0
13	159.0	27.0	-1.0
14	167.0	28.0	0.0
15	182.0	28.0	0.0

ISLAND VIEW (green)
SPARROW'S POINT



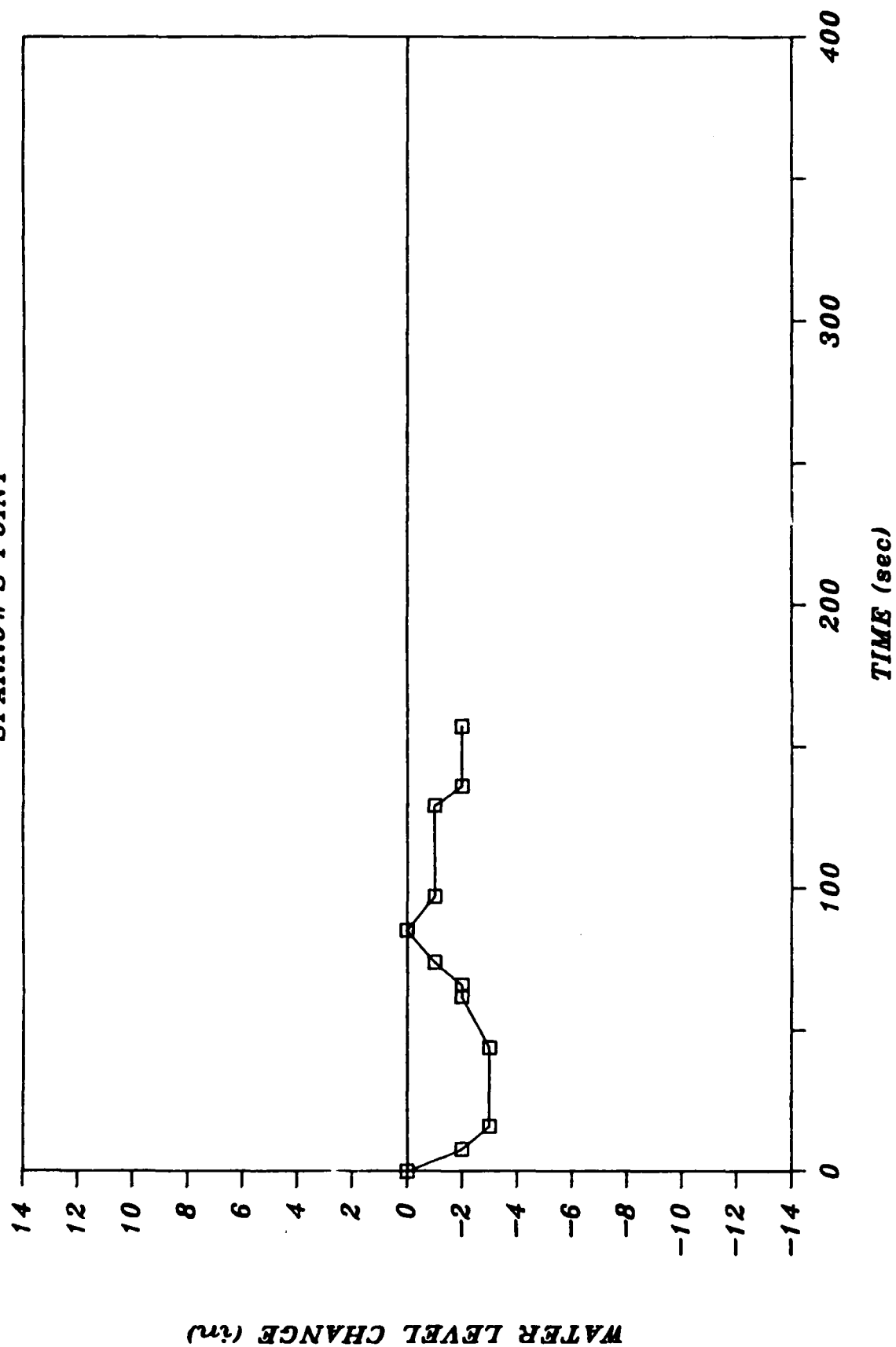
DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW
#####

DATE OF OBSERVATION 5/29/85
VESSEL NAME SPARROWS POINT
DIRECTION DOWNBOUND
VESSEL LENGTH in feet = 699
VESSEL BEAM in feet = 70
VESSEL DRAFT in feet = 27
VESSEL SPEED in feet/sec. = 12.71
BOW ON TIME in sec = 43
STERN ON TIME in sec = 98
DISTANCE TO STAFF GAUGE from green side in feet = 2170
BACKGROUND READING in inches = 25

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	25.0	0.0
2	8.0	23.0	-2.0
3	16.0	22.0	-3.0
4	44.0	22.0	-3.0
5	62.0	23.0	-2.0
6	66.0	23.0	-2.0
7	74.0	24.0	-1.0
8	85.0	25.0	0.0
9	97.0	24.0	-1.0
10	129.0	24.0	-1.0
11	136.0	23.0	-2.0
12	157.0	23.0	-2.0

ISLAND VIEW (red)
SPARROW'S POINT



BC94

DRAWDOWN DATA

NAME OF SECTION	ISLAND VIEW
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

DATE OF OBSERVATION 5/29/85

VESSEL NAME MESABI MINER

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 1000

VESSEL BEAM in feet = 105

VESSEL DRAFT in feet = 28

VESSEL SPEED in feet/sec. = 10.99

BOW ON TIME in sec = 82

STERN ON TIME in sec = 173

DISTANCE TO STAFF GAUGE from green side in feet = 50

BACKGROUND READING in inches = 28

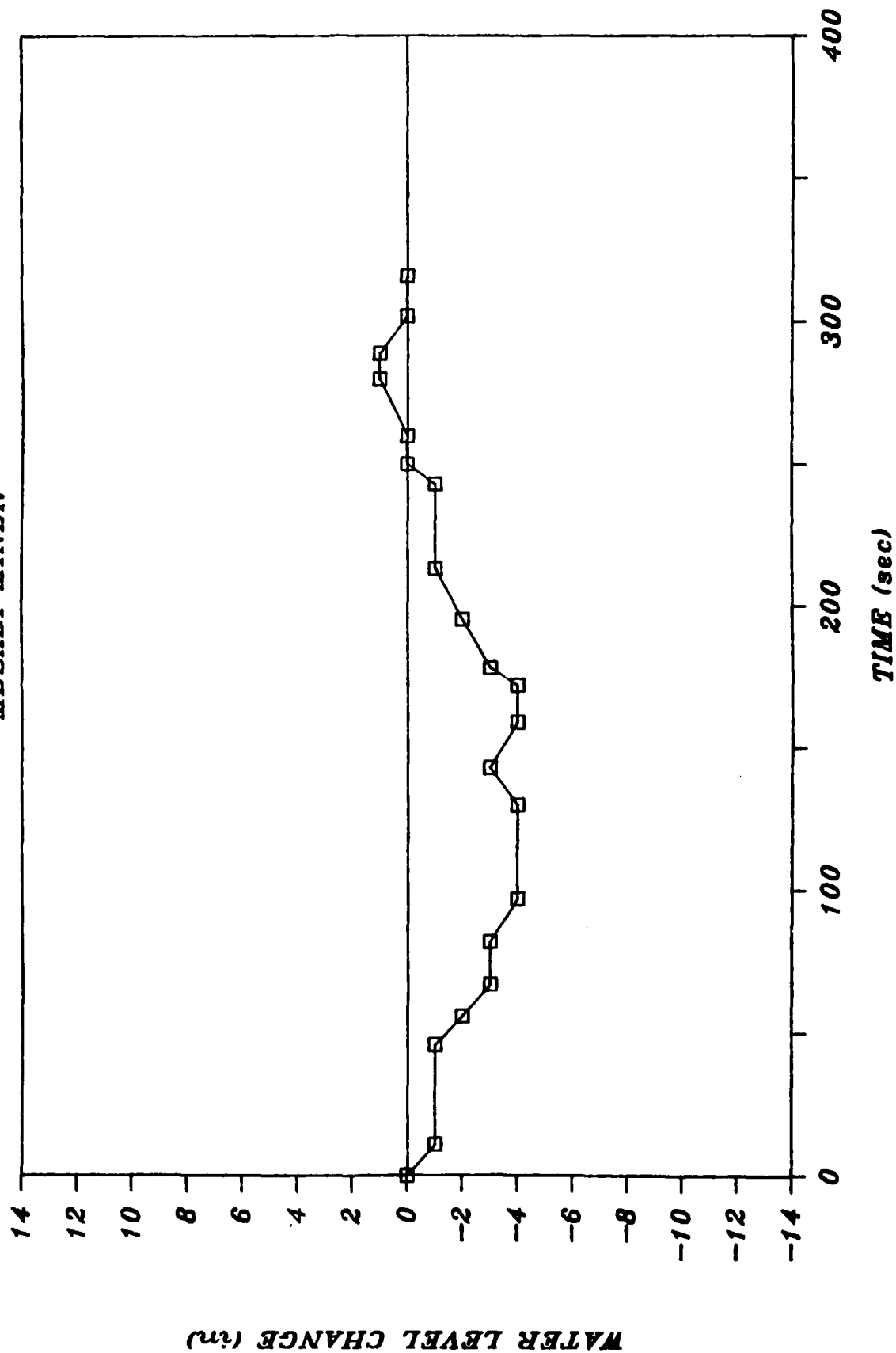
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	28.0	0.0
2	11.0	27.0	-1.0
3	46.0	27.0	-1.0
4	56.0	26.0	-2.0
5	67.0	25.0	-3.0
6	82.0	25.0	-3.0
7	97.0	24.0	-4.0
8	130.0	24.0	-4.0
9	143.0	25.0	-3.0
10	159.0	24.0	-4.0
11	172.0	24.0	-4.0
12	178.0	25.0	-3.0
13	195.0	26.0	-2.0
14	213.0	27.0	-1.0
15	243.0	27.0	-1.0
16	250.0	28.0	0.0
17	260.0	28.0	0.0
18	280.0	29.0	1.0
19	289.0	29.0	1.0
20	302.0	28.0	0.0

DRAWDOWN DATA (continued)

NAME OF SECTION ISLAND VIEW

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	316.0	28.0	0.0

ISLAND VIEW (green)
MESABI MINER



[illegible]

BACKGROUND READING in inches = 23

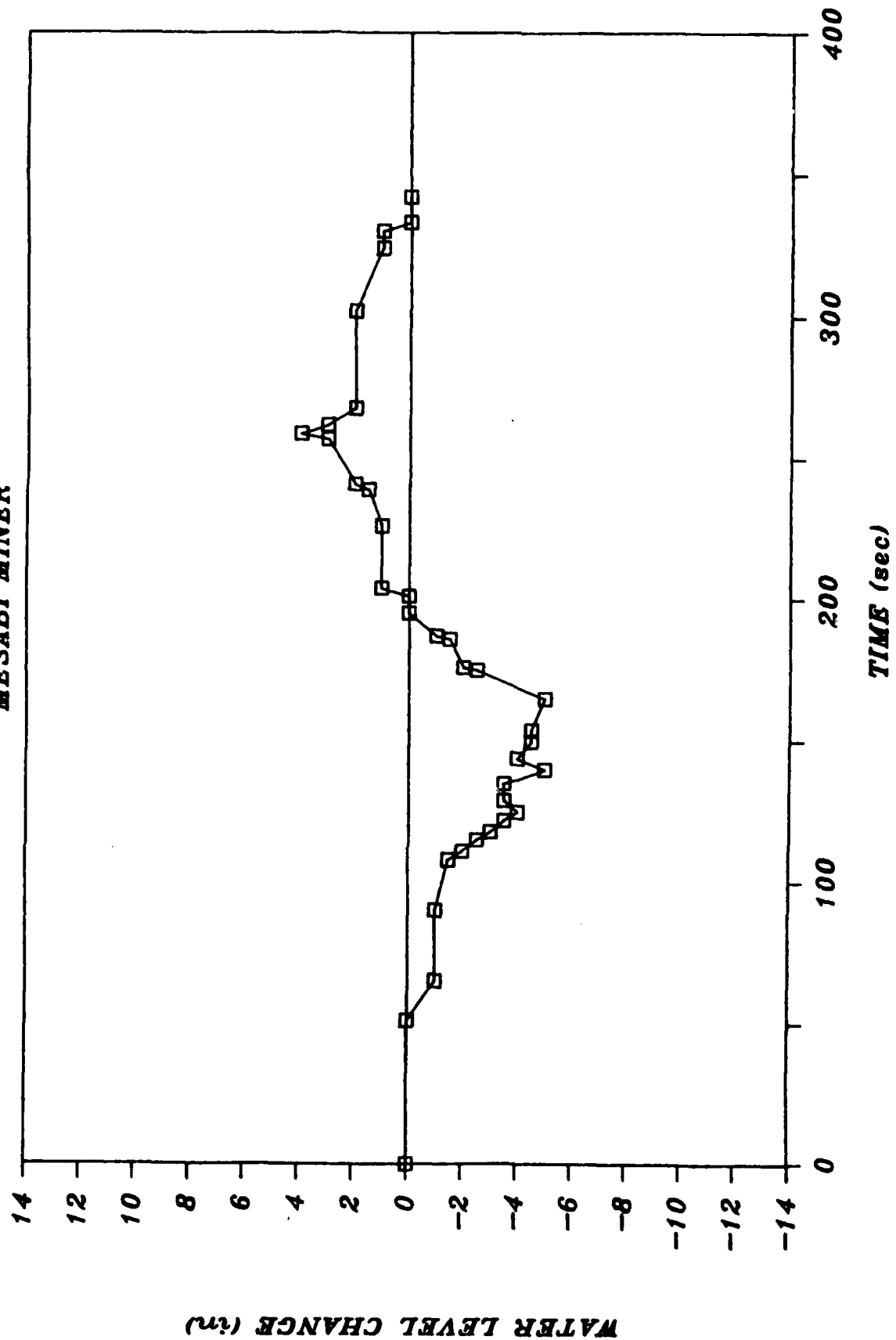
BC98

DRAWDOWN DATA (continued)

NAME OF SECTION ISLAND VIEW

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	187.0	22.0	-1.0
22	195.0	23.0	0.0
23	201.0	23.0	0.0
24	204.0	24.0	1.0
25	226.0	24.0	1.0
26	239.0	24.5	1.5
27	241.0	25.0	2.0
28	257.0	26.0	3.0
29	259.0	27.0	4.0
30	262.0	26.0	3.0
31	268.0	25.0	2.0
32	302.0	25.0	2.0
33	324.0	24.0	1.0
34	330.0	24.0	1.0
35	333.0	23.0	0.0
36	342.0	23.0	0.0

ISLAND VIEW (red)
MESABI MINER



 DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW
 #####

DATE OF OBSERVATION 5/29/85
 VESSEL NAME JAMES R. BARKER
 DIRECTION DOWNBOUND
 VESSEL LENGTH in feet = 1000
 VESSEL BEAM in feet = 105
 VESSEL DRAFT in feet = 27.5
 VESSEL SPEED in feet/sec. = 12.05
 BOW ON TIME in sec = 88
 STERN ON TIME in sec = 171
 DISTANCE TO STAFF GAUGE from green side in feet = 50
 BACKGROUND READING in inches = 28

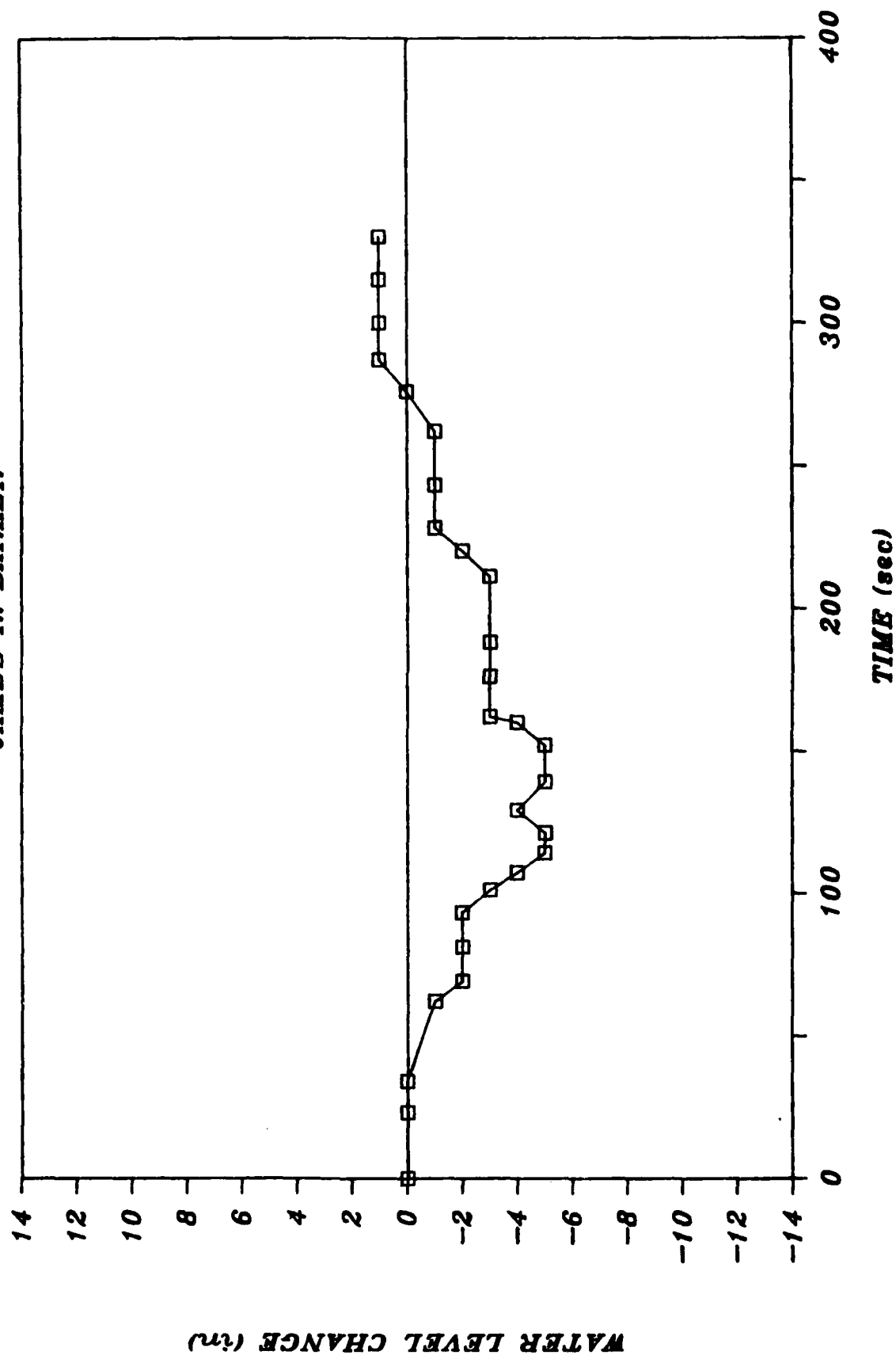
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	28.0	0.0
2	23.0	28.0	0.0
3	34.0	28.0	0.0
4	62.0	27.0	-1.0
5	69.0	26.0	-2.0
6	81.0	26.0	-2.0
7	93.0	26.0	-2.0
8	101.0	25.0	-3.0
9	107.0	24.0	-4.0
10	114.0	23.0	-5.0
11	121.0	23.0	-5.0
12	129.0	24.0	-4.0
13	139.0	23.0	-5.0
14	152.0	23.0	-5.0
15	160.0	24.0	-4.0
16	162.0	25.0	-3.0
17	176.0	25.0	-3.0
18	188.0	25.0	-3.0
19	211.0	25.0	-3.0
20	220.0	26.0	-2.0

DRAWDOWN DATA (continued)

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	228.0	27.0	-1.0
22	243.0	27.0	-1.0
23	262.0	27.0	-1.0
24	276.0	28.0	0.0
25	287.0	29.0	1.0
26	300.0	29.0	1.0
27	315.0	29.0	1.0
28	330.0	29.0	1.0

ISLAND VIEW (green)

JAMES R. BARKER



NAME OF SECTION	ISLAND VIEW
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

BACKGROUND READING in inches = 27

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	27.0	0.0
2	15.0	26.0	-1.0
3	25.0	25.0	-2.0
4	30.0	24.0	-3.0
5	35.0	23.0	-4.0
6	45.0	23.0	-4.0
7	60.0	22.5	-4.5
8	72.0	22.5	-4.5
9	80.0	22.0	-5.0
10	90.0	22.0	-5.0
11	105.0	22.0	-5.0
12	120.0	21.5	-5.5
13	127.0	21.0	-6.0
14	135.0	20.5	-6.5
15	150.0	21.0	-6.0
16	155.0	24.0	-3.0
17	160.0	20.5	-6.5
18	165.0	21.0	-6.0
19	180.0	21.0	-6.0
20	188.0	20.0	-7.0

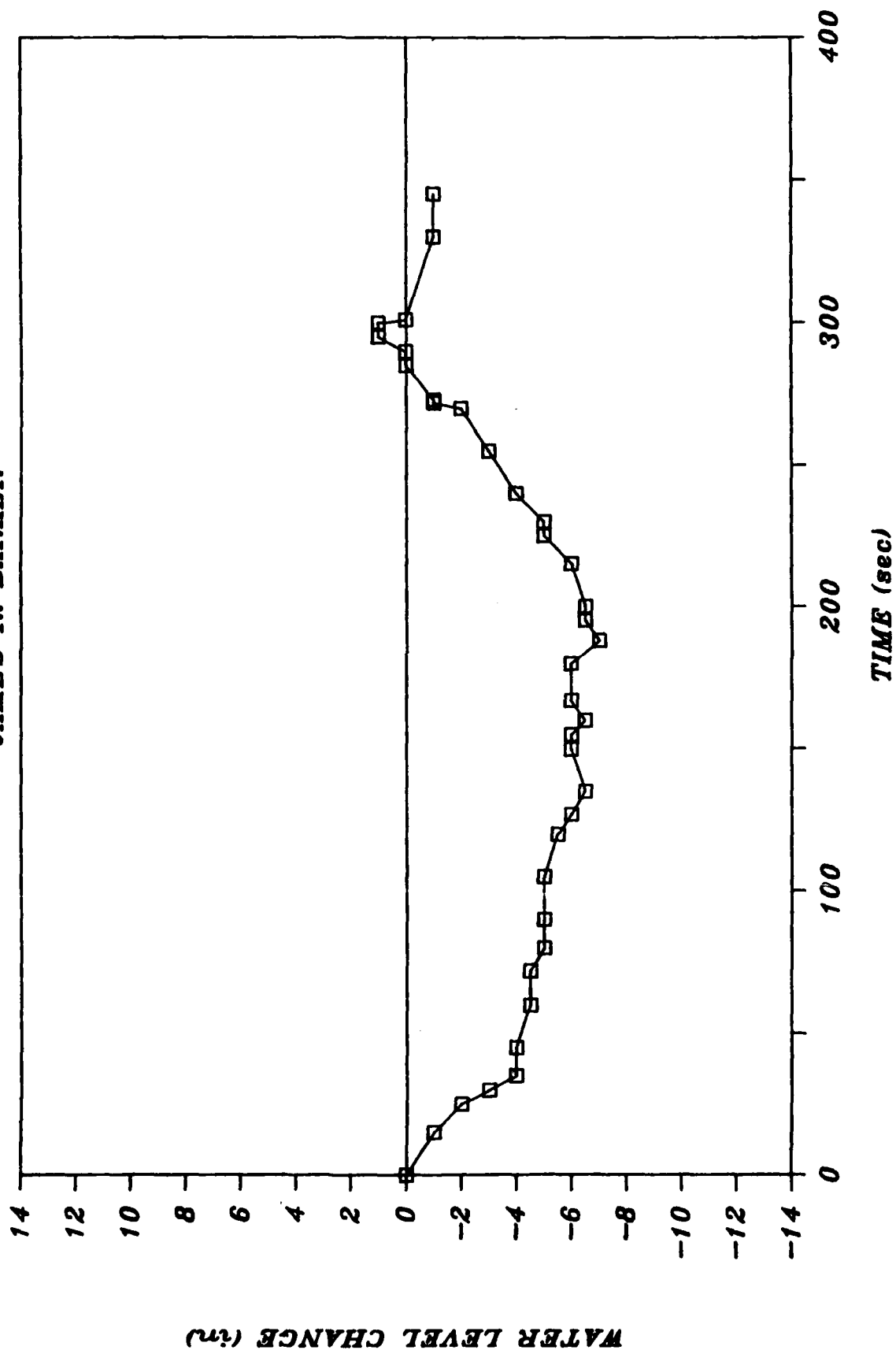
DRAWDOWN DATA (continued)

NAME OF SECTION	ISLAND VIEW
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	195.0	20.5	-6.5
22	200.0	20.5	-6.5
23	215.0	21.0	-6.0
24	225.0	22.0	-5.0
25	230.0	22.0	-5.0
26	240.0	23.0	-4.0
27	255.0	24.0	-3.0
28	270.0	25.0	-2.0
29	272.0	26.0	-1.0
30	273.0	26.0	-1.0
31	285.0	27.0	0.0
32	290.0	27.0	0.0
33	295.0	28.0	1.0
34	300.0	28.0	1.0
35	301.0	27.0	0.0
36	330.0	26.0	-1.0
37	345.0	26.0	-1.0

ISLAND VIEW (red)

JAMES R. BARKER



DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW

DATE OF OBSERVATION 5/29/85

VESSEL NAME STEWART J. CORT

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 1000

VESSEL BEAM in feet = 105

VESSEL DRAFT in feet = 28

VESSEL SPEED in feet/sec. = 12.05

BOW ON TIME in sec = 64

STERN ON TIME in sec = 147

DISTANCE TO STAFF GAUGE from green side in feet = 50

BACKGROUND READING in inches = 29

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	30.0	1.0
2	2.0	29.0	0.0
3	19.0	29.0	0.0
4	30.0	28.0	-1.0
5	39.0	28.0	-1.0
6	50.0	27.0	-2.0
7	68.0	27.0	-2.0
8	75.0	26.0	-3.0
9	79.0	25.0	-4.0
10	87.0	24.0	-5.0
11	94.0	24.0	-5.0
12	105.0	24.0	-5.0
13	118.0	23.0	-6.0
14	125.0	24.0	-5.0
15	132.0	25.0	-4.0
16	138.0	26.0	-3.0
17	151.0	26.0	-3.0
18	165.0	26.0	-3.0
19	190.0	26.0	-3.0
20	212.0	27.0	-2.0

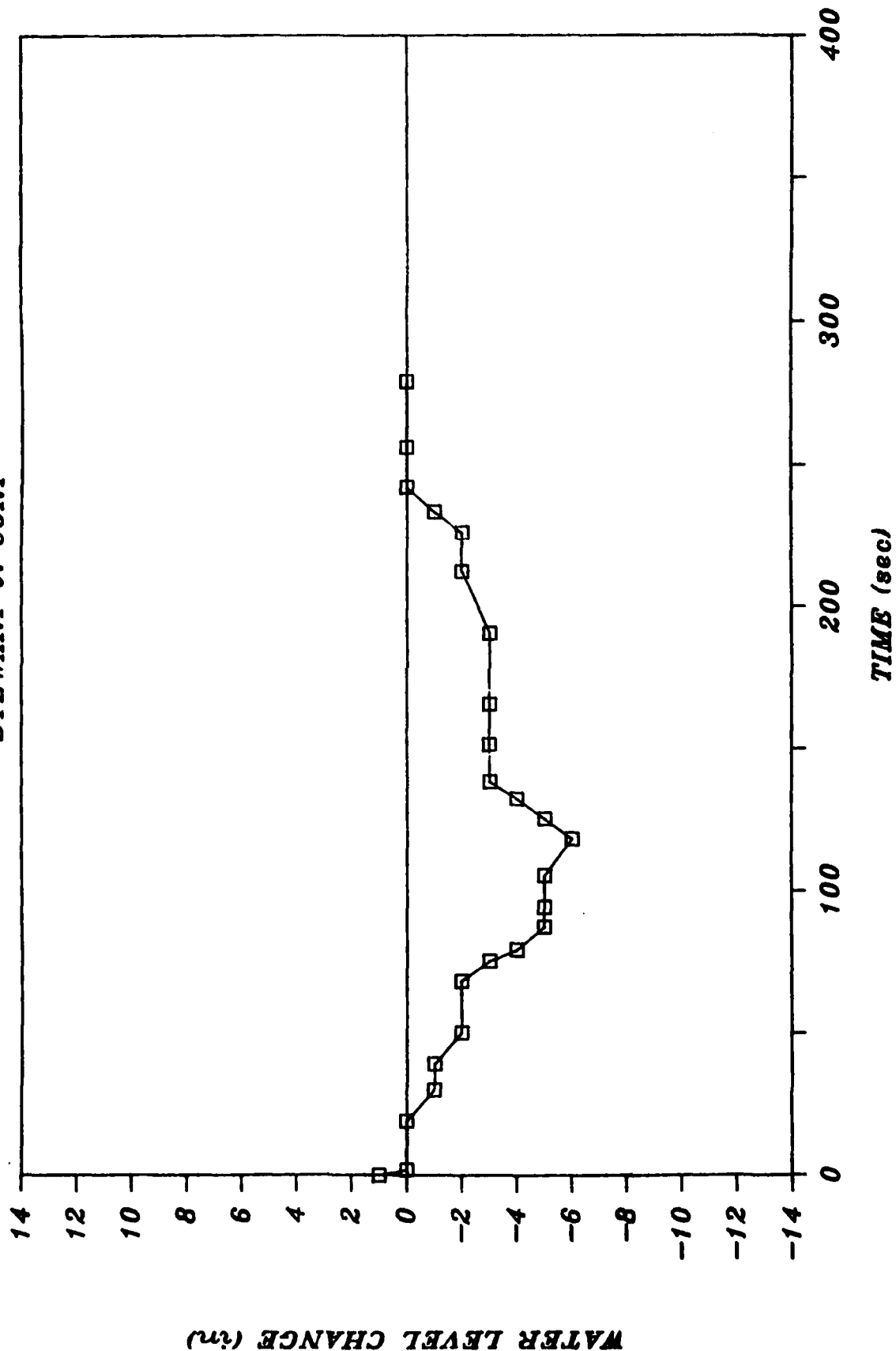
DRAWDOWN DATA (continued)

NAME OF SECTION ISLAND VIEW
#####

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	226.0	27.0	-2.0
22	233.0	28.0	-1.0
23	242.0	29.0	0.0
24	256.0	29.0	0.0
25	279.0	29.0	0.0

ISLAND VIEW (green)

STEWART J. CORT



[illegible]

BACKGROUND READING in inches = 26

BC 110

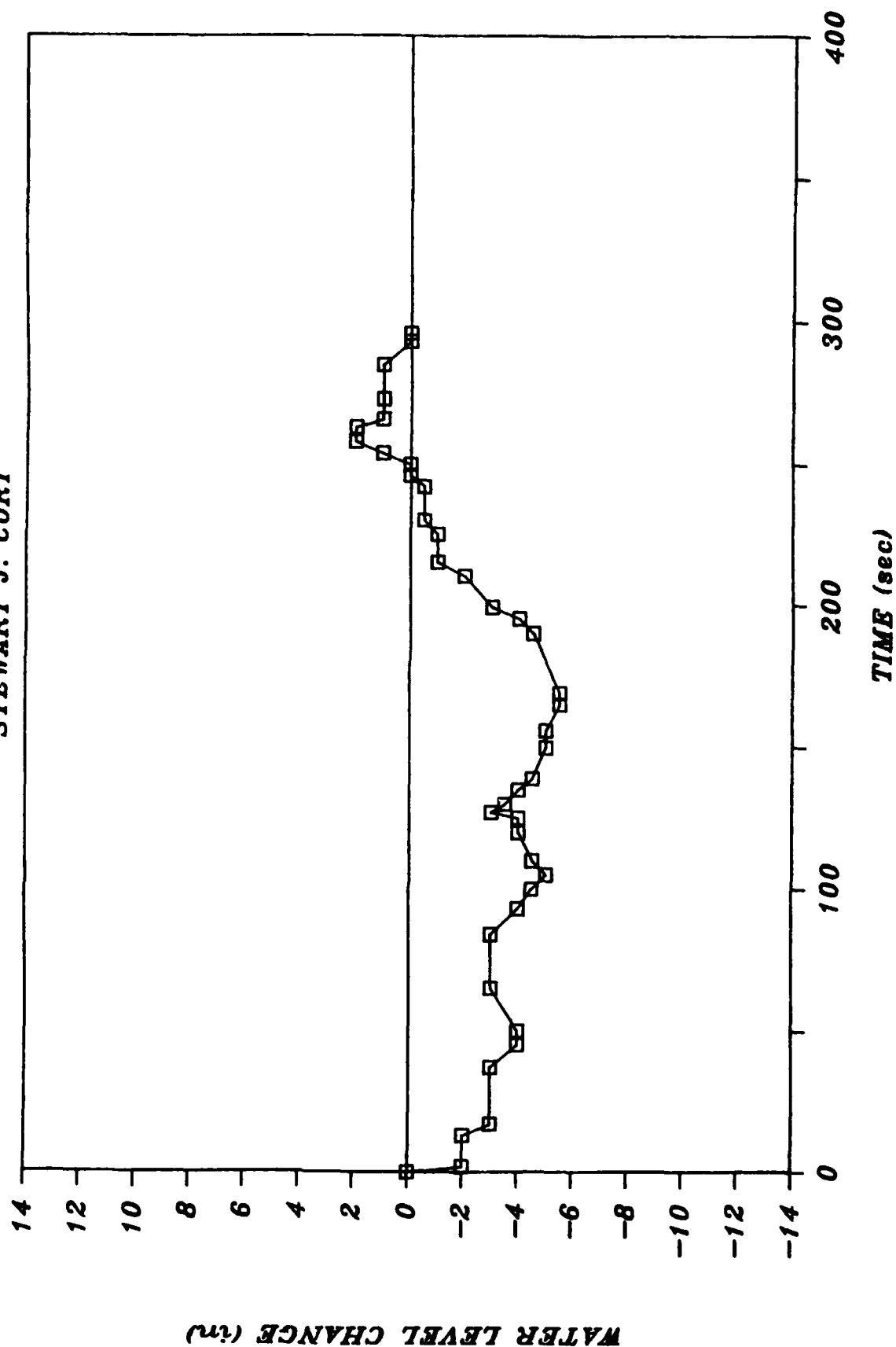
DRAWDOWN DATA (continued)

NAME OF SECTION	ISLAND VIEW
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

DATA POINT	TIME(sec)	READING(in)	FROM BG(in)
21	156.0	21.0	-5.0
22	165.0	20.5	-5.5
23	169.0	20.5	-5.5
24	190.0	21.5	-4.5
25	195.0	22.0	-4.0
26	199.0	23.0	-3.0
27	210.0	24.0	-2.0
28	215.0	25.0	-1.0
29	225.0	25.0	-1.0
30	230.0	25.5	-0.5
31	242.0	25.5	-0.5
32	246.0	26.0	0.0
33	250.0	26.0	0.0
34	254.0	27.0	1.0
35	258.0	28.0	2.0
36	263.0	28.0	2.0
37	266.0	27.0	1.0
38	273.0	27.0	1.0
39	285.0	27.0	1.0
40	293.0	26.0	0.0
41	296.0	26.0	0.0

ISLAND VIEW (red)

STEWART J. CORT



DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW

DATE OF OBSERVATION 5/29/85

VESSEL NAME JOHN G. MUNSON

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 768

VESSEL BEAM in feet = 72

VESSEL DRAFT in feet = 26.5

VESSEL SPEED in feet/sec. = 10.24

BOW ON TIME in sec = 78

STERN ON TIME in sec = 153

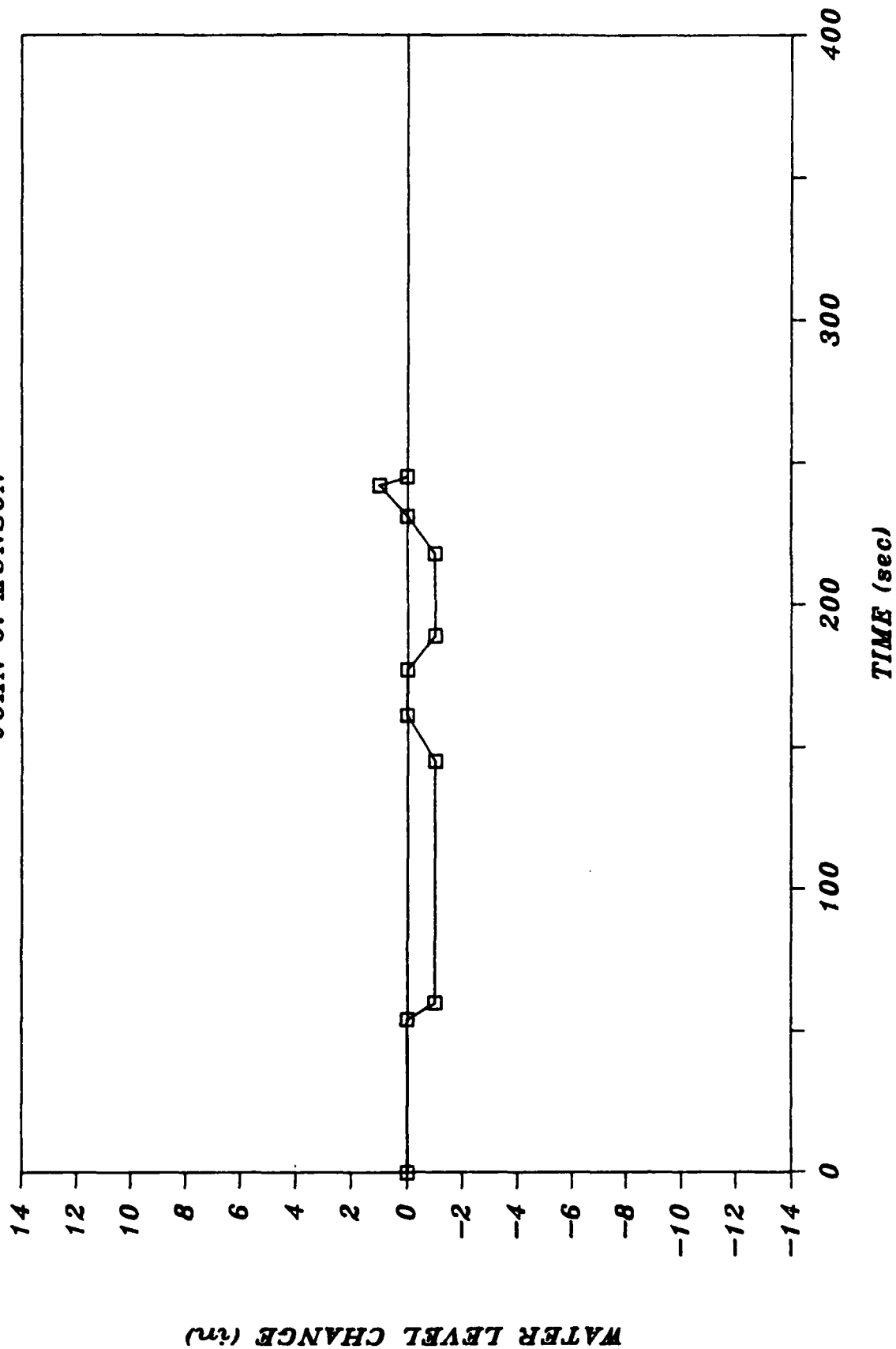
DISTANCE TO STAFF GAUGE from green side in feet = 50

BACKGROUND READING in inches = 27

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	27.0	0.0
2	54.0	27.0	0.0
3	60.0	26.0	-1.0
4	145.0	26.0	-1.0
5	161.0	27.0	0.0
6	177.0	27.0	0.0
7	189.0	26.0	-1.0
8	218.0	26.0	-1.0
9	231.0	27.0	0.0
10	242.0	28.0	1.0
11	245.0	27.0	0.0

ISLAND VIEW (green)

JOHN C. MUNSON



DRAWDOWN DATA

NAME OF SECTION	ISLAND VIEW
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

DATE OF OBSERVATION 5/29/85

VESSEL NAME JOHN G. MUNSON

DIRECTION	DOWNBOUND
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

VESSEL LENGTH in feet = 768

VESSEL BEAM in feet = 72

VESSEL DRAFT in feet = 26.5

VESSEL SPEED in feet/sec. = 10.24

BOW ON TIME in sec = 78

STERN ON TIME in sec = 153

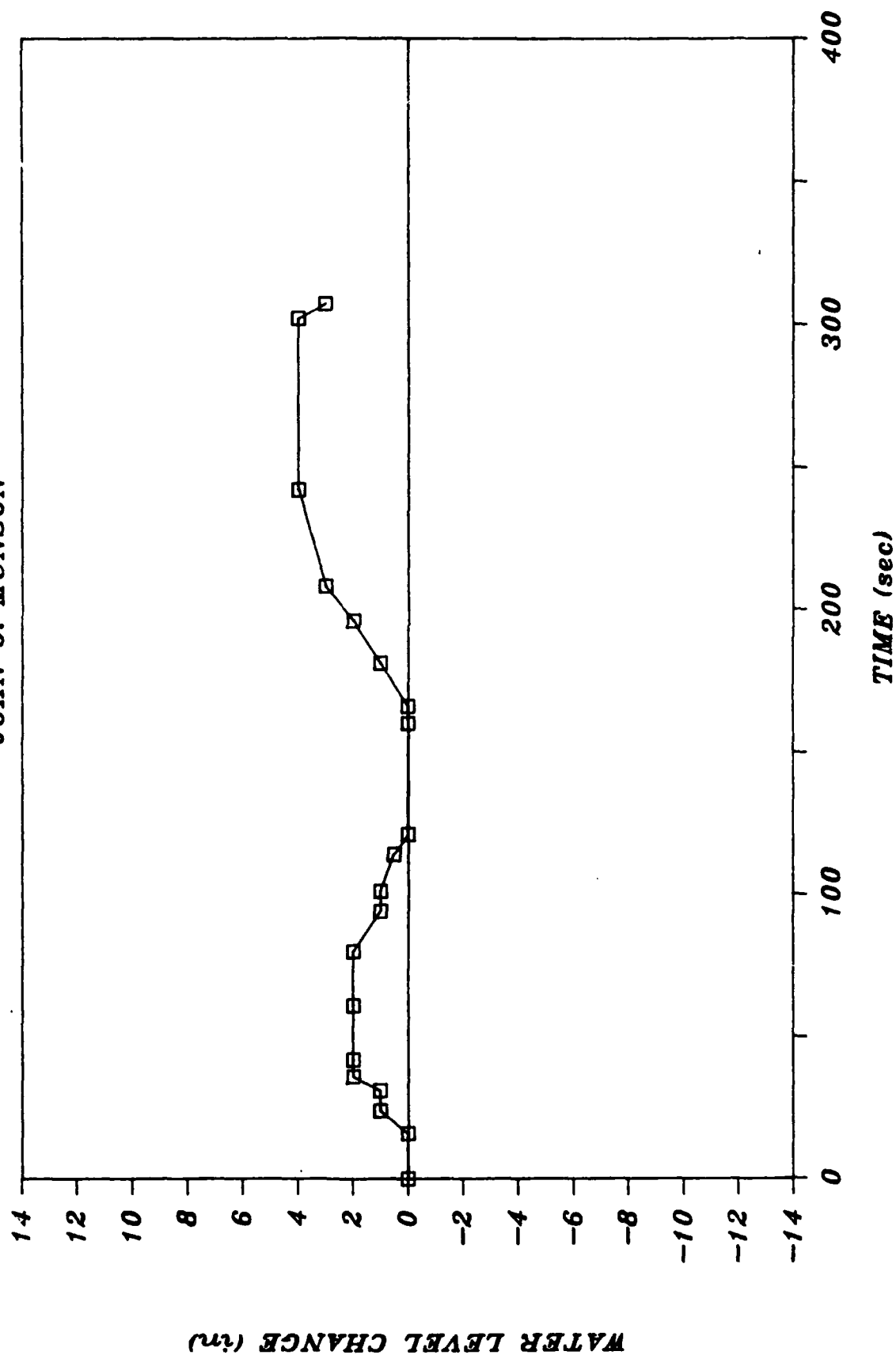
DISTANCE TO STAFF GAUGE from green side in feet = 2170

BACKGROUND READING in inches = 20

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	20.0	0.0
2	16.0	20.0	0.0
3	24.0	21.0	1.0
4	31.0	21.0	1.0
5	36.0	22.0	2.0
6	42.0	22.0	2.0
7	61.0	22.0	2.0
8	80.0	22.0	2.0
9	94.0	21.0	1.0
10	101.0	21.0	1.0
11	114.0	20.5	0.5
12	121.0	20.0	0.0
13	160.0	20.0	0.0
14	166.0	20.0	0.0
15	181.0	21.0	1.0
16	196.0	22.0	2.0
17	208.0	23.0	3.0
18	242.0	24.0	4.0
19	302.0	24.0	4.0
20	307.0	23.0	3.0

ISLAND VIEW (red)

JOHN G. MUNSON



DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW

DATE OF OBSERVATION 5/29/85

VESSEL NAME PAUL THAYER

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 630

VESSEL BEAM in feet = 68

VESSEL DRAFT in feet = 26.5

VESSEL SPEED in feet/sec. = 13.4

BOW ON TIME in sec = 64

STERN ON TIME in sec = 111

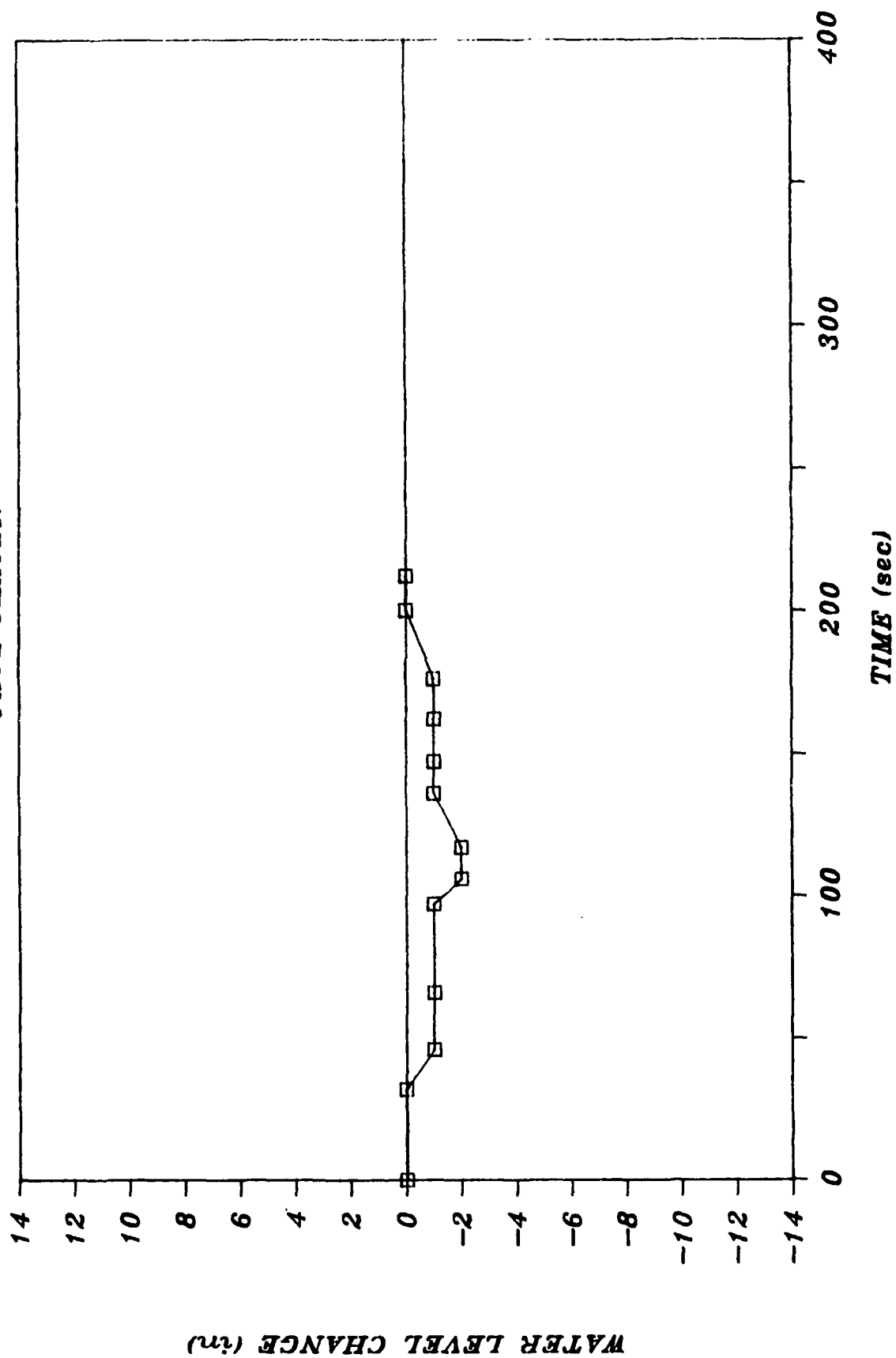
DISTANCE TO STAFF GAUGE from green side in feet = 50

BACKGROUND READING in inches = 29

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	29.0	0.0
2	32.0	29.0	0.0
3	46.0	28.0	-1.0
4	66.0	28.0	-1.0
5	97.0	28.0	-1.0
6	106.0	27.0	-2.0
7	117.0	27.0	-2.0
8	136.0	28.0	-1.0
9	147.0	28.0	-1.0
10	162.0	28.0	-1.0
11	176.0	28.0	-1.0
12	200.0	29.0	0.0
13	212.0	29.0	0.0

ISLAND VIEW (green)

PAUL THAYER



oo

DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW

oo

DATE OF OBSERVATION 5/29/85

VESSEL NAME PAUL THAYER

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 630

VESSEL BEAM in feet = 68

VESSEL DRAFT in feet = 26.5

VESSEL SPEED in feet/sec. = 13.4

BOW ON TIME in sec = 64

STERN ON TIME in sec = 111

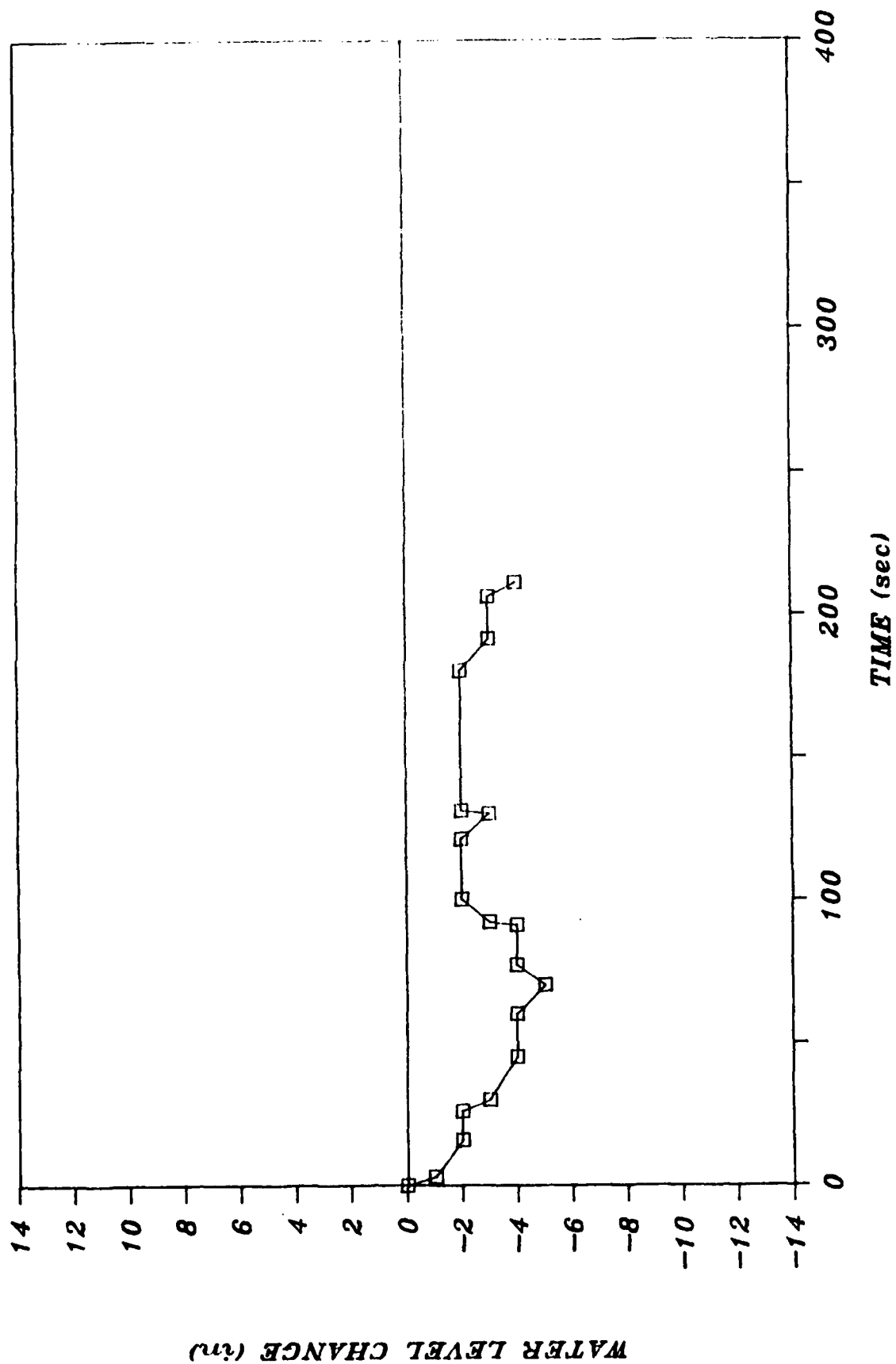
DISTANCE TO STAFF GAUGE from green side in feet = 2170

BACKGROUND READING in inches = 27

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	27.0	0.0
2	3.0	26.0	-1.0
3	16.0	25.0	-2.0
4	26.0	25.0	-2.0
5	30.0	24.0	-3.0
6	45.0	23.0	-4.0
7	60.0	23.0	-4.0
8	70.0	22.0	-5.0
9	77.0	23.0	-4.0
10	91.0	23.0	-4.0
11	92.0	24.0	-3.0
12	100.0	25.0	-2.0
13	121.0	25.0	-2.0
14	130.0	24.0	-3.0
15	131.0	25.0	-2.0
16	180.0	25.0	-2.0
17	191.0	24.0	-3.0
18	206.0	24.0	-3.0
19	211.0	23.0	-4.0

ISLAND VIEW (red)

PAUL THAYER



#####

DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW

#####

DATE OF OBSERVATION 5/29/85

VESSEL NAME CHICAGO TRIBUNE

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 319

VESSEL BEAM in feet = 44

VESSEL DRAFT in feet = 19.7

VESSEL SPEED in feet/sec. = 12.27

BOW ON TIME in sec = 77

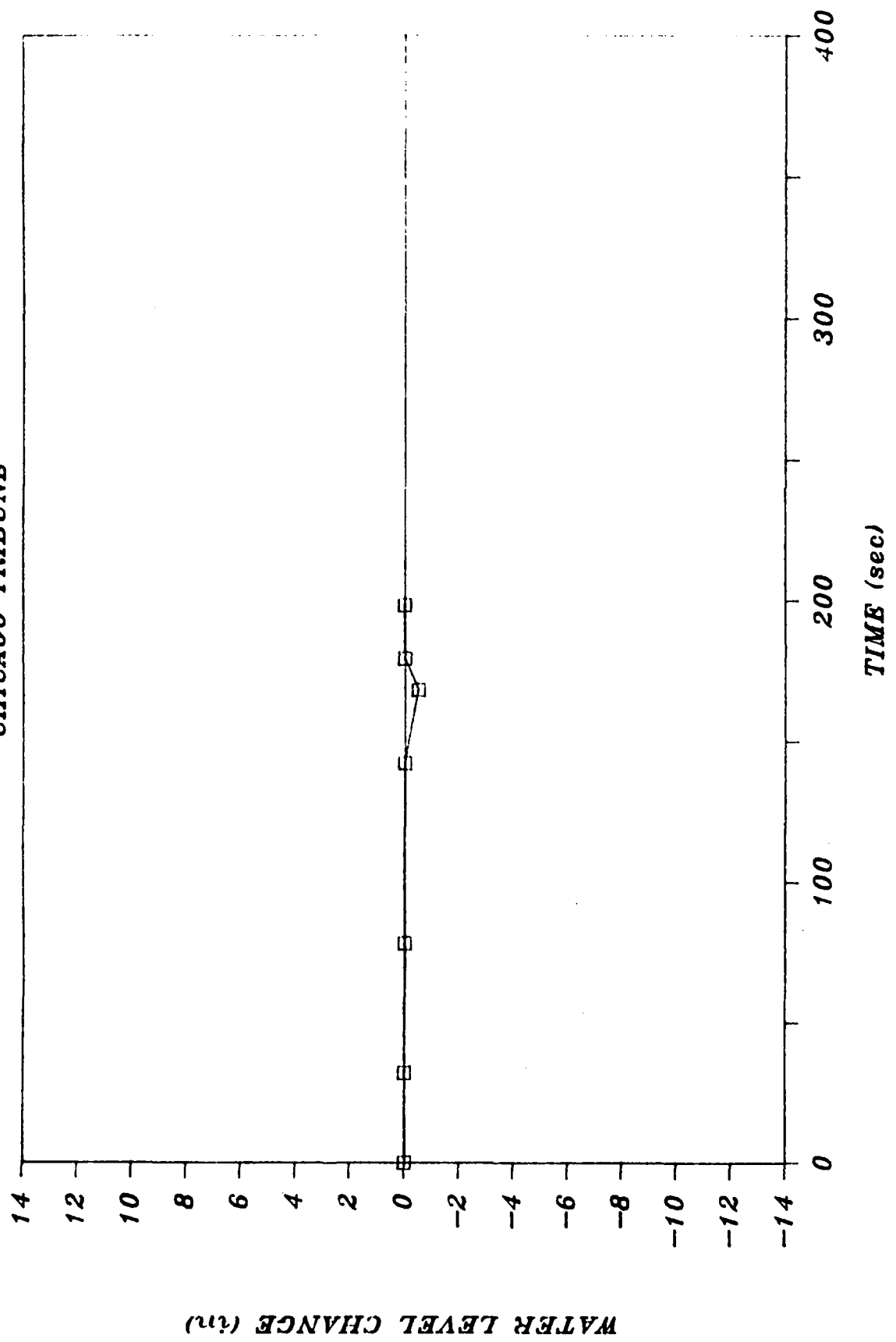
STERN ON TIME in sec = 103

DISTANCE TO STAFF GAUGE from green side in feet = 50

BACKGROUND READING in inches = 28

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	28.0	0.0
2	32.0	28.0	0.0
3	78.0	28.0	0.0
4	142.0	28.0	0.0
5	168.0	27.5	-0.5
6	179.0	28.0	0.0
7	198.0	28.0	0.0

ISLAND VIEW (green)
CHICAGO TRIBUNE



DRAWDOWN DATA

NAME OF SECTION ISLAND VIEW

DATE OF OBSERVATION 5/29/85

VESSEL NAME CHICAGO TRIBUNE

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 319

VESSEL BEAM in feet = 44

VESSEL DRAFT in feet = 19.7

VESSEL SPEED in feet/sec. = 12.27

BOW ON TIME in sec = 77

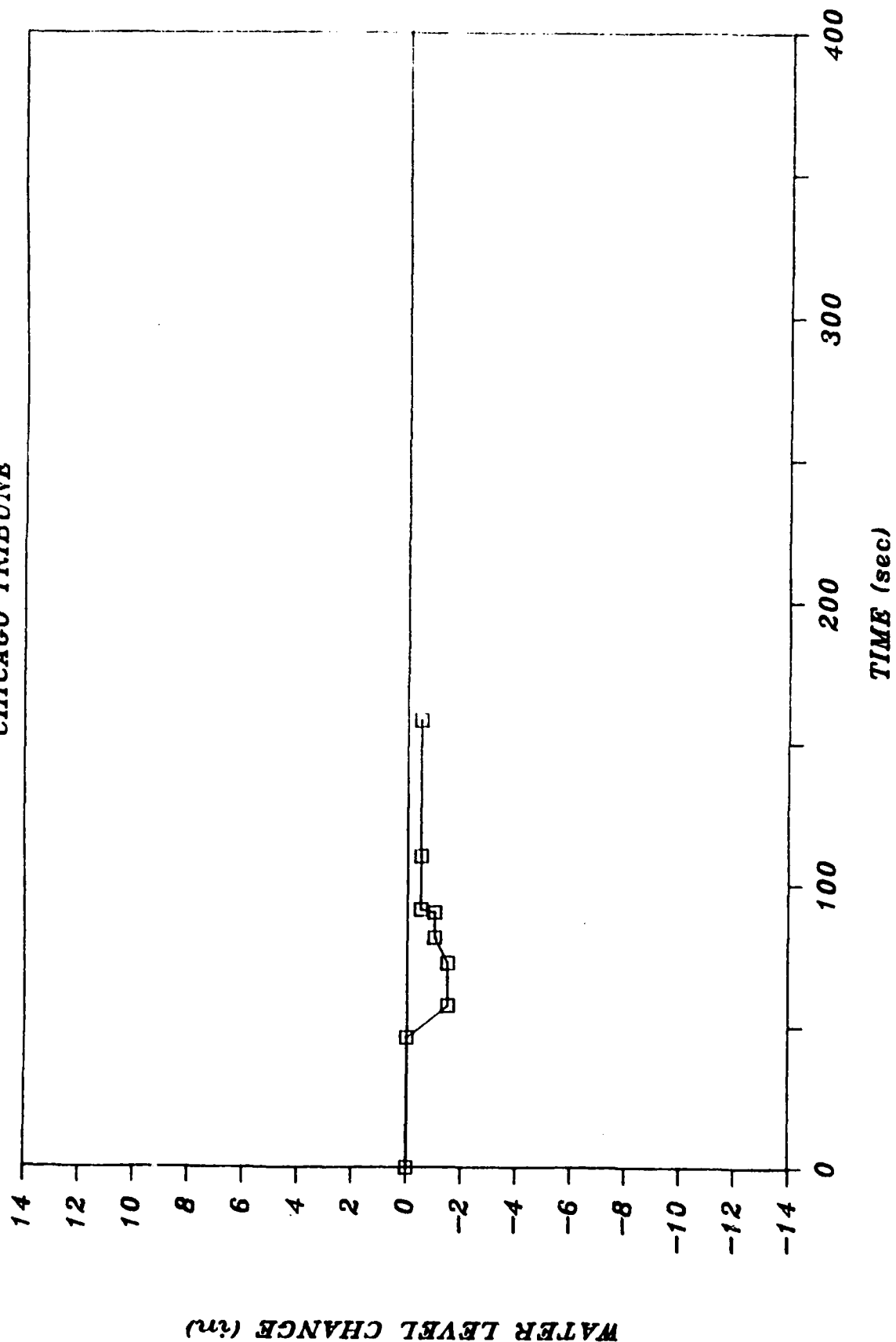
STERN ON TIME in sec = 103

DISTANCE TO STAFF GAUGE from green side in feet = 2170

BACKGROUND READING in inches = 25

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	25.0	0.0
2	46.0	25.0	0.0
3	57.0	23.5	-1.5
4	72.0	23.5	-1.5
5	81.0	24.0	-1.0
6	90.0	24.0	-1.0
7	91.0	24.5	-0.5
8	110.0	24.5	-0.5
9	158.0	24.5	-0.5

ISLAND VIEW (red) CHICAGO TRIBUNE



BC124

NINE . MILE

DRAWDOWN DATA

NAME OF SECTION NINE MILE

DATE OF OBSERVATION 10/15/77

VESSEL NAME J. BURTON AYERS

DIRECTION UPBOUND

VESSEL LENGTH in feet = 620

VESSEL BEAM in feet = 60

VESSEL DRAFT in feet = 23

VESSEL SPEED in feet/sec. = 15.5

BOW ON TIME in sec = 56

STERN ON TIME in sec = 96

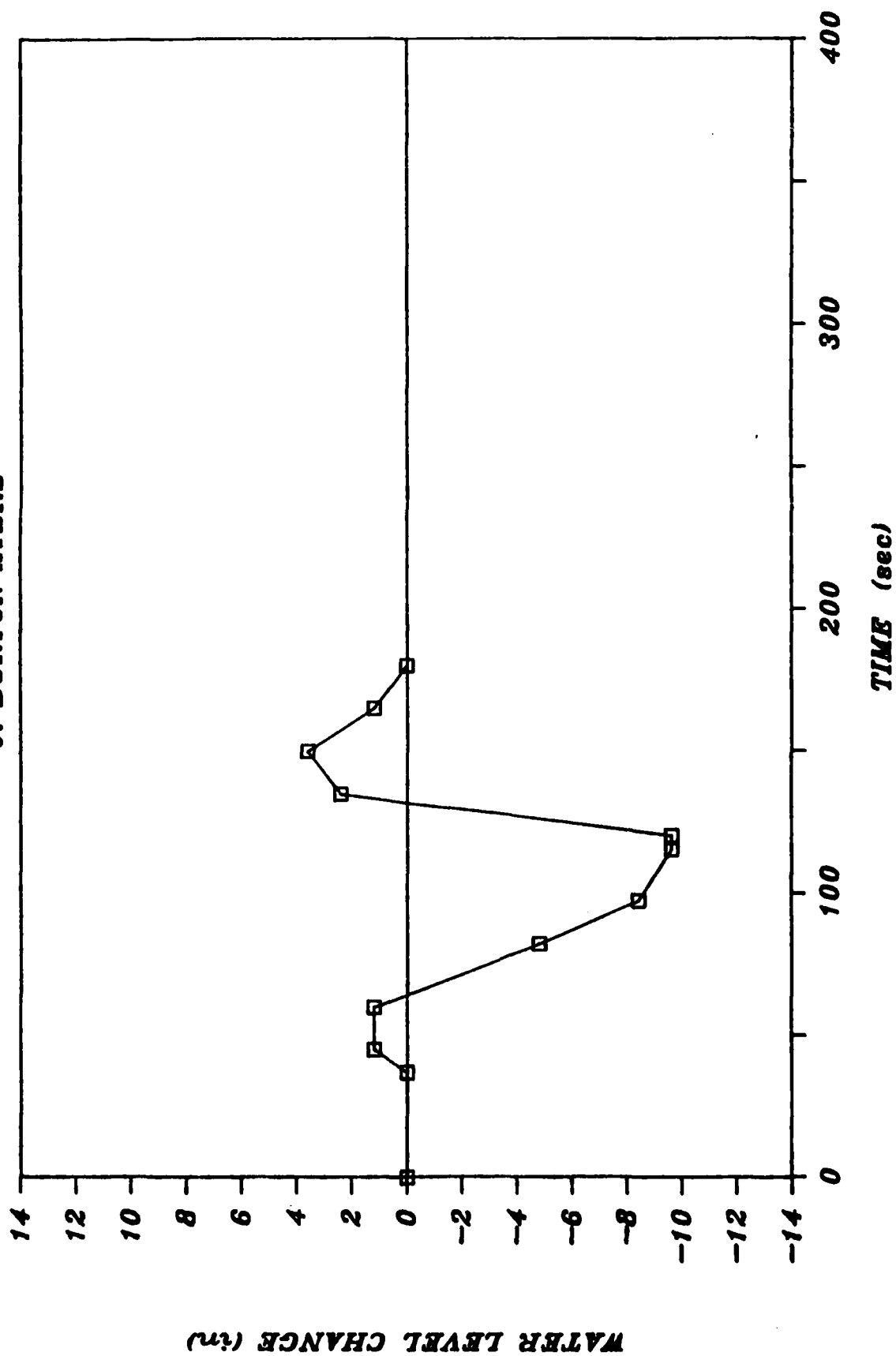
DISTANCE TO STAFF GAUGE from green side in feet = 129red (R-7)

BACKGROUND READING in inches = 12

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	12.0	0.0
2	37.0	12.0	0.0
3	45.0	13.2	1.2
4	60.0	13.2	1.2
5	82.0	7.2	-4.8
6	97.0	3.6	-8.4
7	115.0	2.4	-9.6
8	120.0	2.4	-9.6
9	135.0	14.4	2.4
10	150.0	15.6	3.6
11	165.0	13.2	1.2
12	180.0	12.0	0.0

NINE MILE 10/15/77

J. BURTON AYERS



DRAWDOWN DATA

NAME OF SECTION **NINE MILE**

VESSEL NAME H. LEE WHITE

VESSEL LENGTH in feet = 704

VESSEL DRAFT in feet = 25

BOW ON TIME in sec = 60

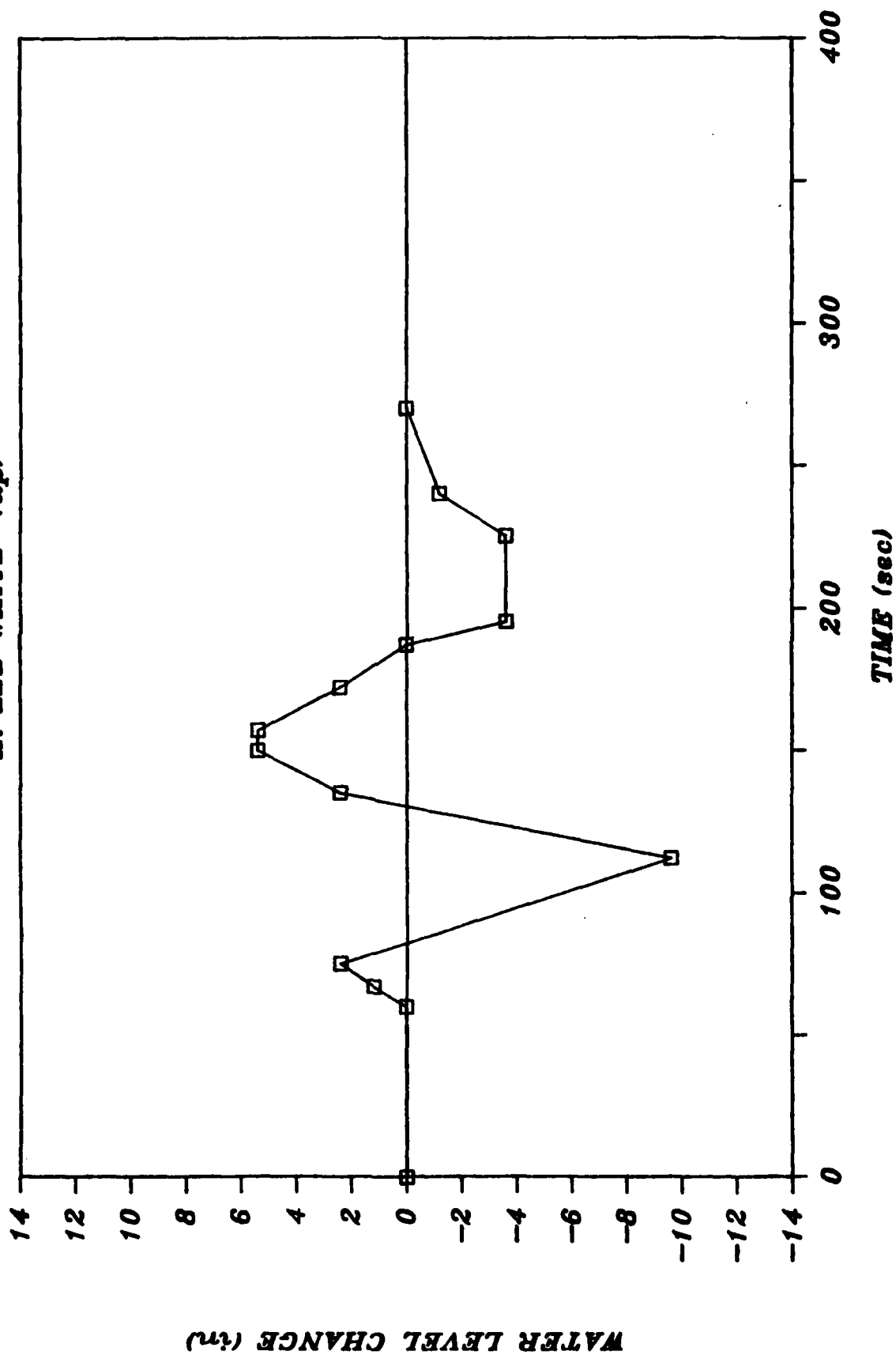
DISTANCE TO STAFF GAUGE from green side in feet = 129red (R-7)

BACKGROUND READING in inches = 12

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	12.0	0.0
2	60.0	12.0	0.0
3	67.0	13.2	1.2
4	75.0	14.4	2.4
5	112.0	2.4	-9.6
6	135.0	14.4	2.4
7	150.0	17.4	5.4
8	157.0	17.4	5.4
9	172.0	14.4	2.4
10	187.0	12.0	0.0
11	195.0	8.4	-3.6
12	225.0	8.4	-3.6
13	240.0	10.8	-1.2
14	270.0	12.0	0.0

NINE MILE 10/15/77

H. LEE WHITE (wp)



DRAWDOWN DATA

NAME OF SECTION NINE MILE

DATE OF OBSERVATION 10/15/77

VESSEL NAME COLLINGWOOD

DIRECTION UPBOUND

VESSEL LENGTH in feet = 332

VESSEL BEAM in feet = 44

VESSEL DRAFT in feet = 21

VESSEL SPEED in feet/sec. = 14.4

BOW ON TIME in sec = 67

STERN ON TIME in sec = 90

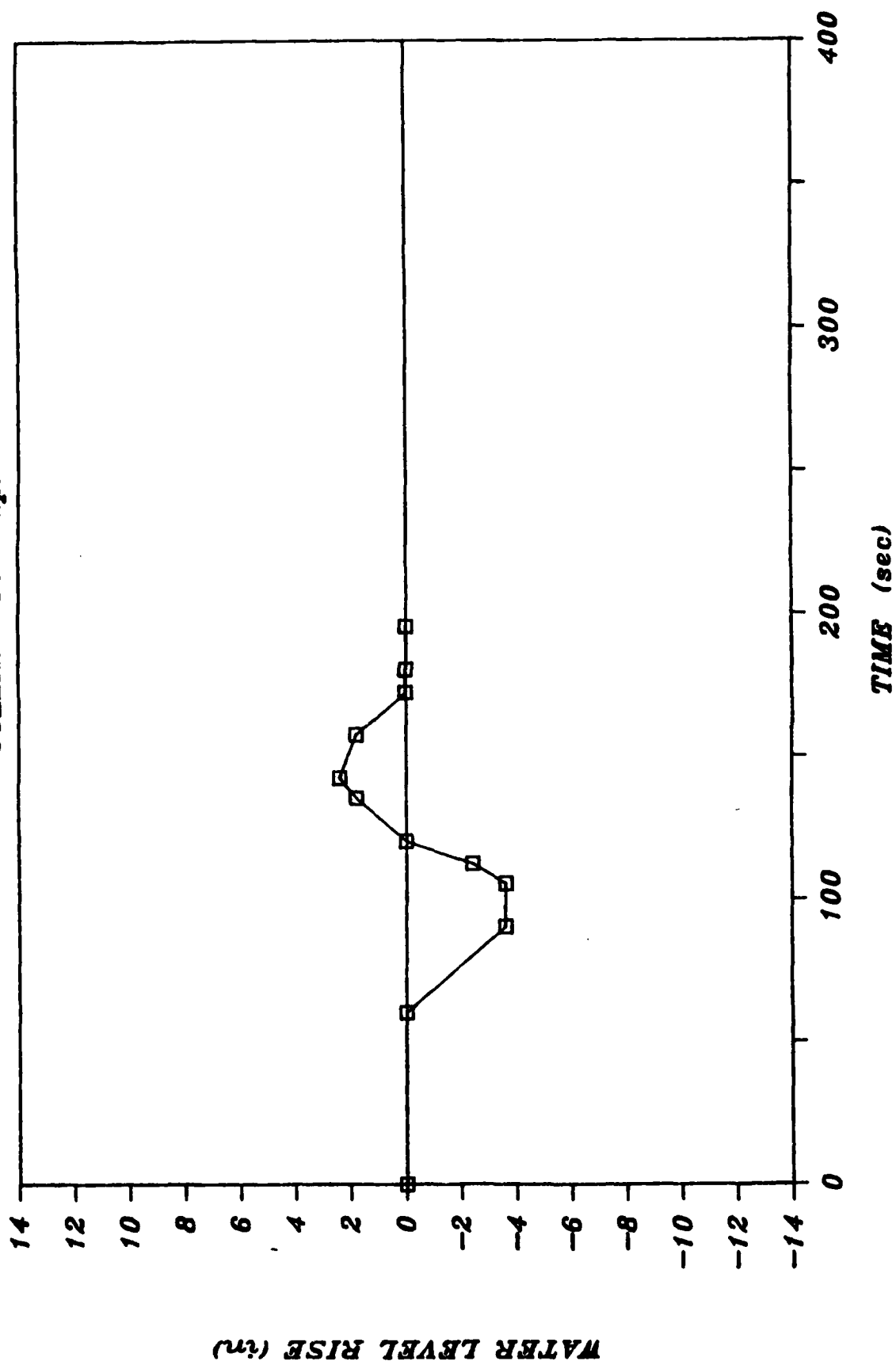
DISTANCE TO STAFF GAUGE from green side in feet = 129red (R-7)

BACKGROUND READING in inches = 12

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	12.0	0.0
2	60.0	12.0	0.0
3	90.0	8.4	-3.6
4	105.0	8.4	-3.6
5	112.0	9.6	-2.4
6	120.0	12.0	0.0
7	135.0	13.8	1.8
8	142.0	14.4	2.4
9	157.0	13.8	1.8
10	172.0	12.0	0.0
11	180.0	12.0	0.0
12	195.0	12.0	0.0

NINE MILE 10/15/77

COLLINGWOOD (wp)



DRAWDOWN DATA

NAME OF SECTION NINE MILE

DATE OF OBSERVATION 11/3/84

VESSEL NAME TARANTAU

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 26.5

VESSEL SPEED in feet/sec. = 14.9

BOW ON TIME in sec = 67

STERN ON TIME in sec = 116

DISTANCE TO STAFF GAUGE from green side in feet = 5794

BACKGROUND READING in inches = 15

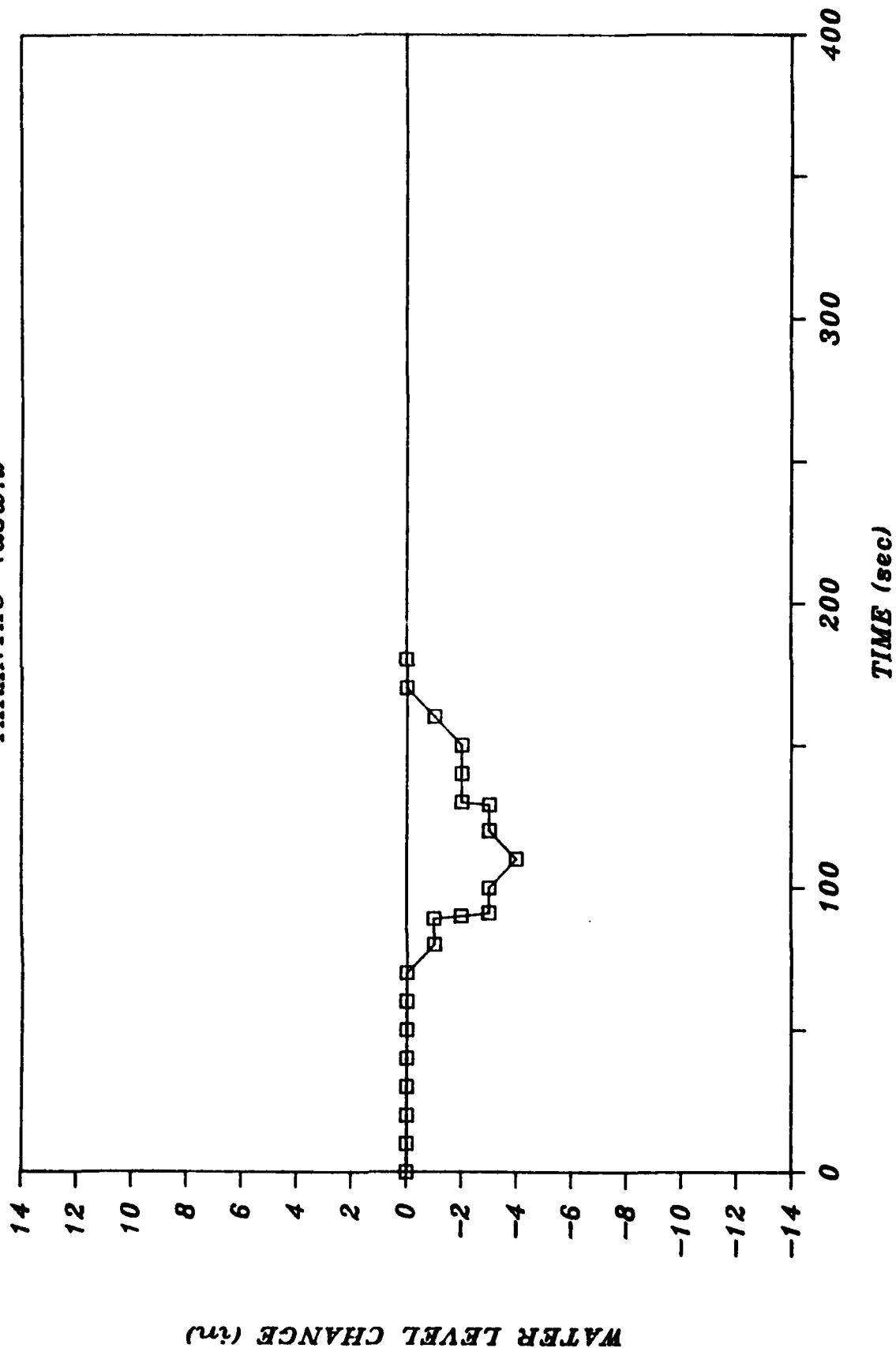
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	15.0	0.0
2	10.0	15.0	0.0
3	20.0	15.0	0.0
4	30.0	15.0	0.0
5	40.0	15.0	0.0
6	50.0	15.0	0.0
7	60.0	15.0	0.0
8	70.0	15.0	0.0
9	80.0	14.0	-1.0
10	89.0	14.0	-1.0
11	90.0	13.0	-2.0
12	91.0	12.0	-3.0
13	100.0	12.0	-3.0
14	110.0	11.0	-4.0
15	120.0	12.0	-3.0
16	129.0	12.0	-3.0
17	130.0	13.0	-2.0
18	140.0	13.0	-2.0
19	150.0	13.0	-2.0
20	160.0	14.0	-1.0

DRAWDOWN DATA (continued)

NAME OF SECTION NINE MILE

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	170.0	15.0	0.0
22	180.0	15.0	0.0
23	190.0	15.0	0.0

NINE MILE 11/3/84
TARANTAU (down)



#####

DRAWDOWN DATA

NAME OF SECTION NINE MILE

#####

DATE OF OBSERVATION 11/3/84

VESSEL NAME TARANTAU

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 26.5

VESSEL SPEED in feet/sec. = 14.9

BOW ON TIME in sec = 67

STERN ON TIME in sec = 116

DISTANCE TO STAFF GAUGE from green side in feet = 5842

BACKGROUND READING in inches = 14

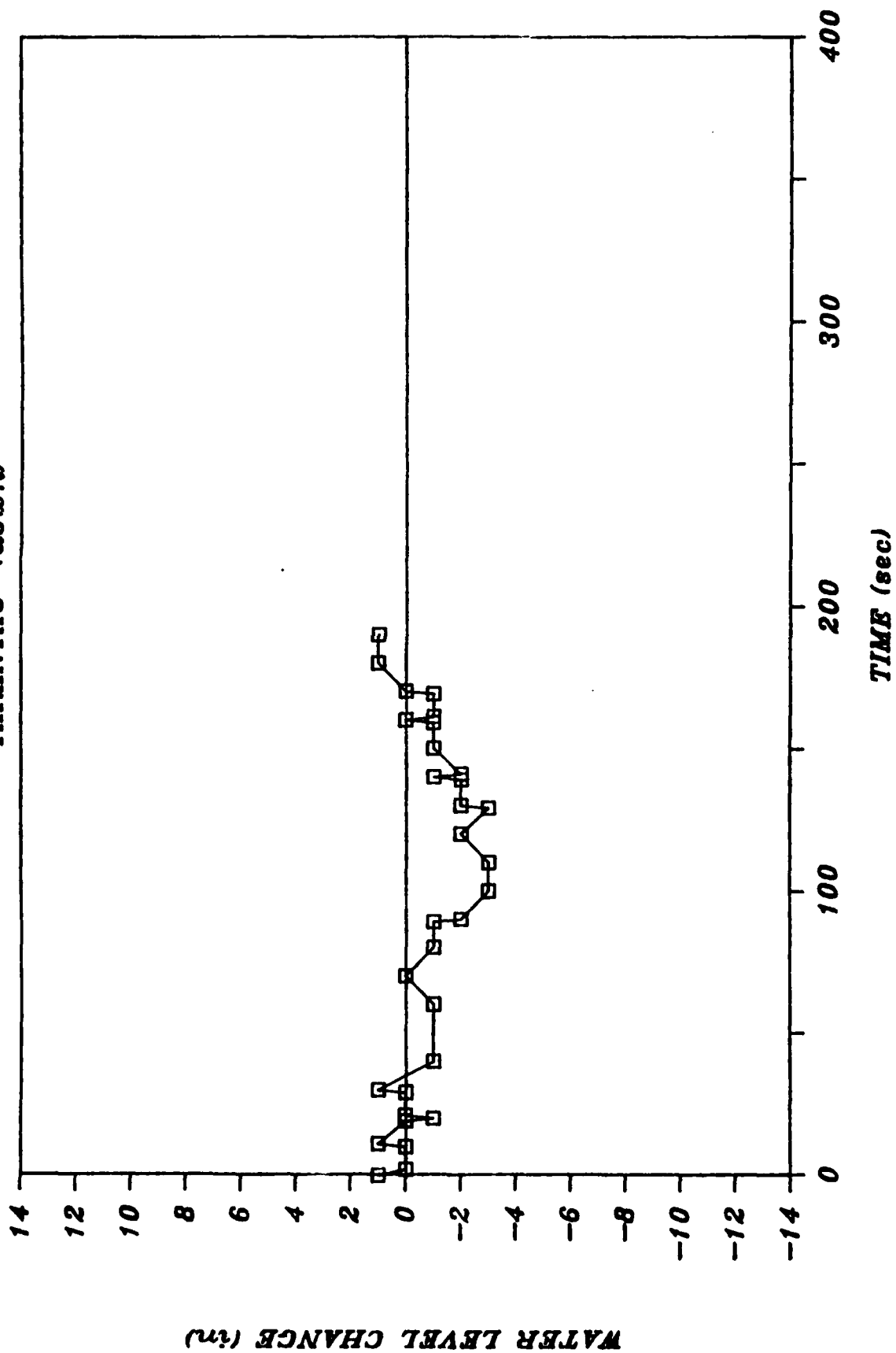
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	15.0	1.0
2	2.0	14.0	0.0
3	10.0	14.0	0.0
4	11.0	15.0	1.0
5	19.0	14.0	0.0
6	20.0	13.0	-1.0
7	21.0	14.0	0.0
8	29.0	14.0	0.0
9	30.0	15.0	1.0
10	40.0	13.0	-1.0
11	60.0	13.0	-1.0
12	70.0	14.0	0.0
13	80.0	13.0	-1.0
14	89.0	13.0	-1.0
15	90.0	12.0	-2.0
16	100.0	11.0	-3.0
17	110.0	11.0	-3.0
18	120.0	12.0	-2.0
19	129.0	11.0	-3.0
20	130.0	12.0	-2.0

DRAWDOWN DATA (continued)

NAME OF SECTION NINE MILE

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	139.0	12.0	-2.0
22	140.0	13.0	-1.0
23	141.0	12.0	-2.0
24	150.0	13.0	-1.0
25	159.0	13.0	-1.0
26	160.0	14.0	0.0
27	161.0	13.0	-1.0
28	169.0	13.0	-1.0
29	170.0	14.0	0.0
30	180.0	15.0	1.0
31	190.0	15.0	1.0

NINE MILE 11/3/84
TARANTAU (down)



DRAWDOWN DATA

NAME OF SECTION NINE MILE

DATE OF OBSERVATION 11/3/84

VESSEL NAME KINSMAN INDEPENDENT

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 600

VESSEL BEAM in feet = 60

VESSEL DRAFT in feet = 21

VESSEL SPEED in feet/sec. = 12.5

BOW ON TIME in sec = 54

STERN ON TIME in sec = 102

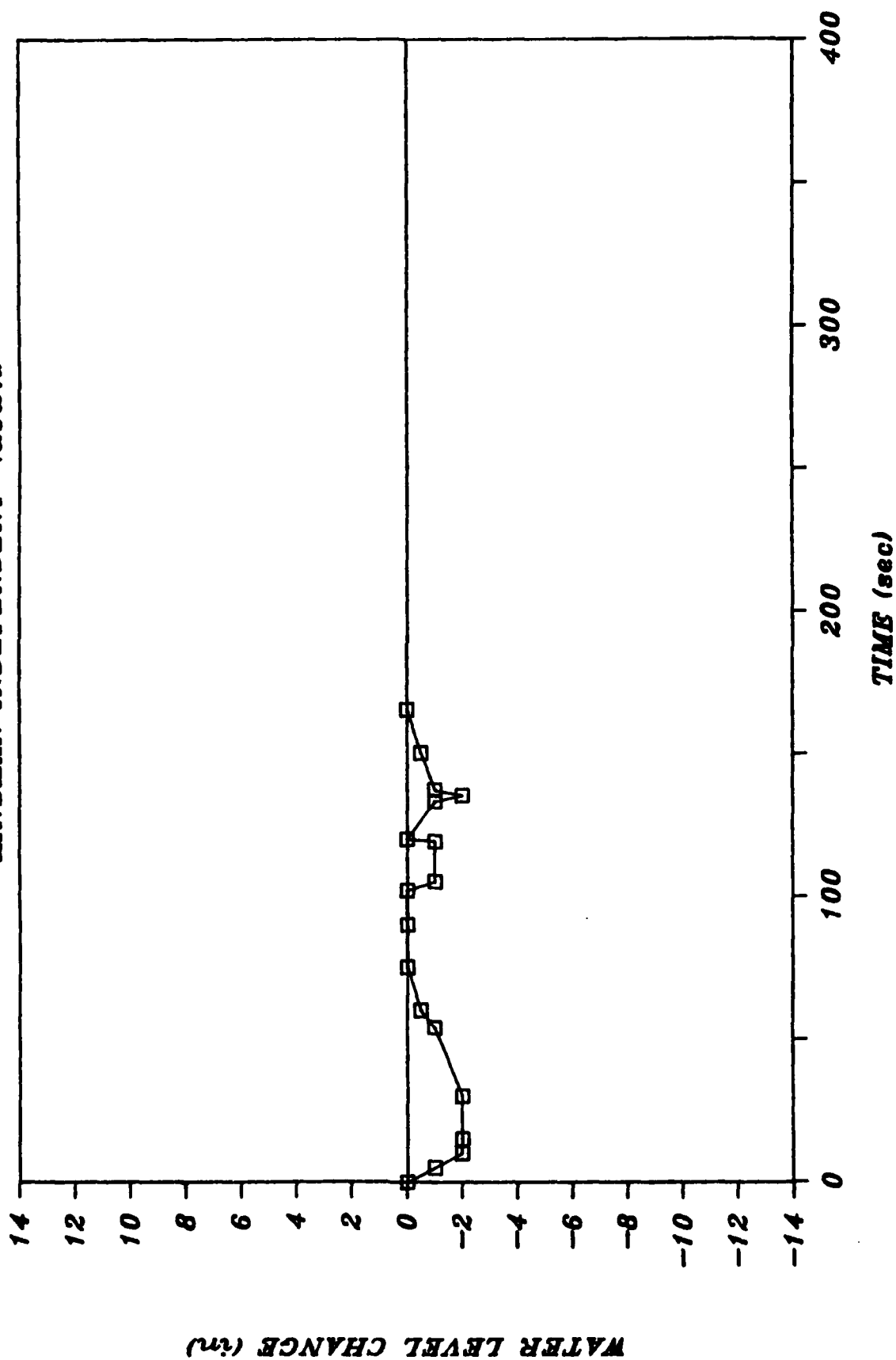
DISTANCE TO STAFF GAUGE from green side in feet = 5794

BACKGROUND READING in inches = 15

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	15.0	0.0
2	5.0	14.0	-1.0
3	10.0	13.0	-2.0
4	15.0	13.0	-2.0
5	30.0	13.0	-2.0
6	54.0	14.0	-1.0
7	60.0	14.5	-0.5
8	75.0	15.0	0.0
9	90.0	15.0	0.0
10	102.0	15.0	0.0
11	105.0	14.0	-1.0
12	119.0	14.0	-1.0
13	120.0	15.0	0.0
14	133.0	14.0	-1.0
15	135.0	13.0	-2.0
16	137.0	14.0	-1.0
17	150.0	14.5	-0.5
18	165.0	15.0	0.0

NINE MILE 11/3/84

KINSMAN INDEPENDENT (down)



#####

DRAWDOWN DATA

NAME OF SECTION NINE MILE

#####

DATE OF OBSERVATION 11/3/84

VESSEL NAME KINSMAN INDEPENDENT

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 600

VESSEL BEAM in feet = 60

VESSEL DRAFT in feet = 21

VESSEL SPEED in feet/sec. = 12.5

BOW ON TIME in sec = 54

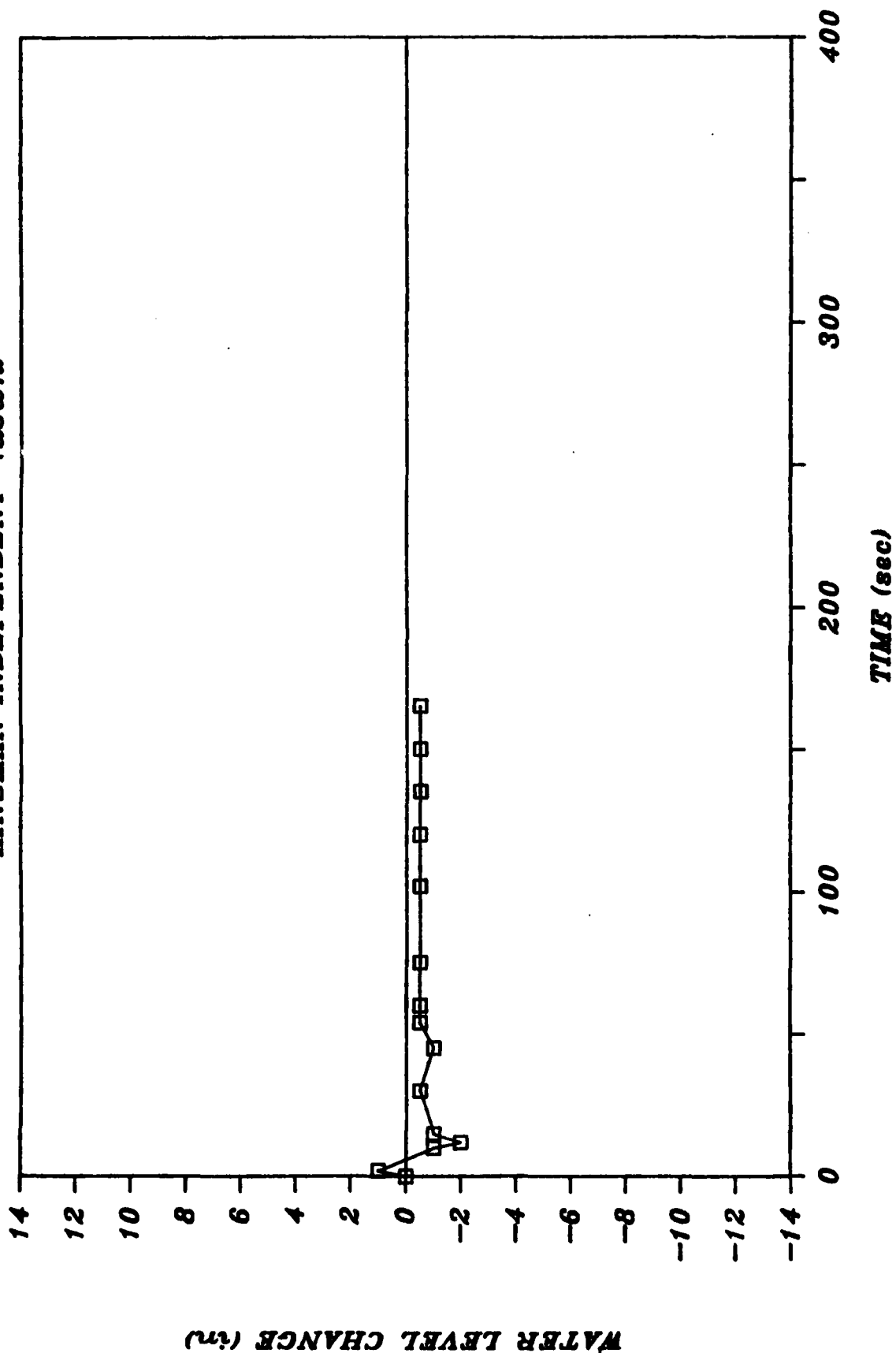
STERN ON TIME in sec = 102

DISTANCE TO STAFF GAUGE from green side in feet = 5842

BACKGROUND READING in inches = 14

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	14.0	0.0
2	2.0	15.0	1.0
3	10.0	13.0	-1.0
4	12.0	12.0	-2.0
5	15.0	13.0	-1.0
6	30.0	13.5	-0.5
7	45.0	13.0	-1.0
8	54.0	13.5	-0.5
9	60.0	13.5	-0.5
10	75.0	13.5	-0.5
11	102.0	13.5	-0.5
12	120.0	13.5	-0.5
13	135.0	13.5	-0.5
14	150.0	13.5	-0.5
15	165.0	13.5	-0.5

NINE MILE 11/3/84
KINSMAN INDEPENDENT (down)



DRAWDOWN DATA

NAME OF SECTION NINE MILE

DATE OF OBSERVATION 5/22/85

VESSEL NAME SASKATCHEWAN PIONEER

DIRECTION UPBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75.75

VESSEL DRAFT in feet = 22

VESSEL SPEED in feet/sec. = 12.17

BOW ON TIME in sec = 64

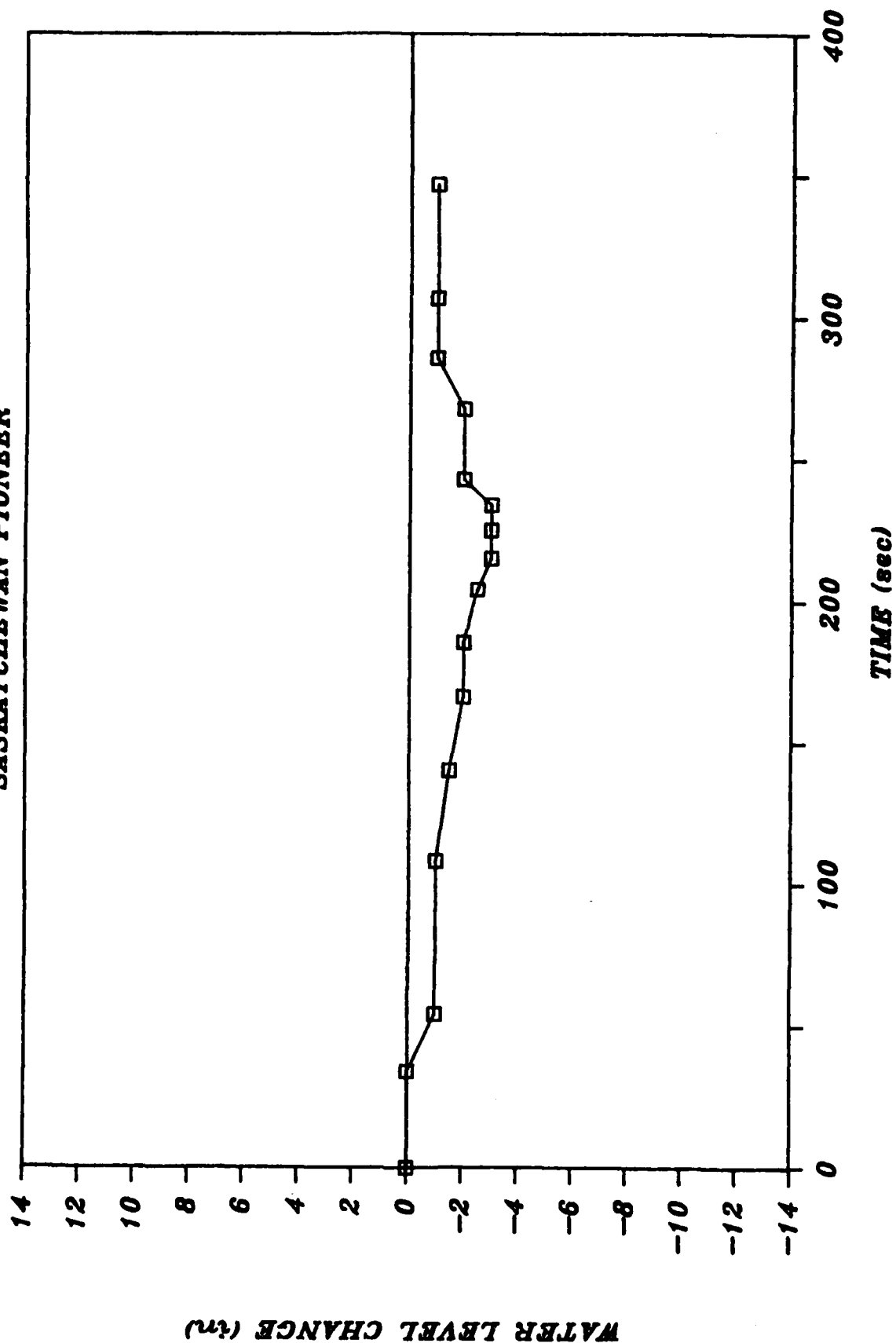
STERN ON TIME in sec = 124

DISTANCE TO STAFF GAUGE from green side in feet = 250

BACKGROUND READING in inches = 19

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	19.0	0.0
2	34.0	19.0	0.0
3	54.0	18.0	-1.0
4	108.0	18.0	-1.0
5	140.0	17.5	-1.5
6	166.0	17.0	-2.0
7	185.0	17.0	-2.0
8	204.0	16.5	-2.5
9	215.0	16.0	-3.0
10	225.0	16.0	-3.0
11	234.0	16.0	-3.0
12	243.0	17.0	-2.0
13	268.0	17.0	-2.0
14	286.0	18.0	-1.0
15	307.0	18.0	-1.0
16	347.0	18.0	-1.0

NINE MILE (green)
SASKATCHEWAN PIONEER



DRAWDOWN DATA

NAME OF SECTION NINE MILE

DATE OF OBSERVATION 5/22/85

VESSEL NAME SASKACHEWAN PIONEER

DIRECTION UPBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75.75

VESSEL DRAFT in feet = 22

VESSEL SPEED in feet/sec. = 12.17

BOW ON TIME in sec = 64

STERN ON TIME in sec = 124

DISTANCE TO STAFF GAUGE from green side in feet = 5800

BACKGROUND READING in inches = 28

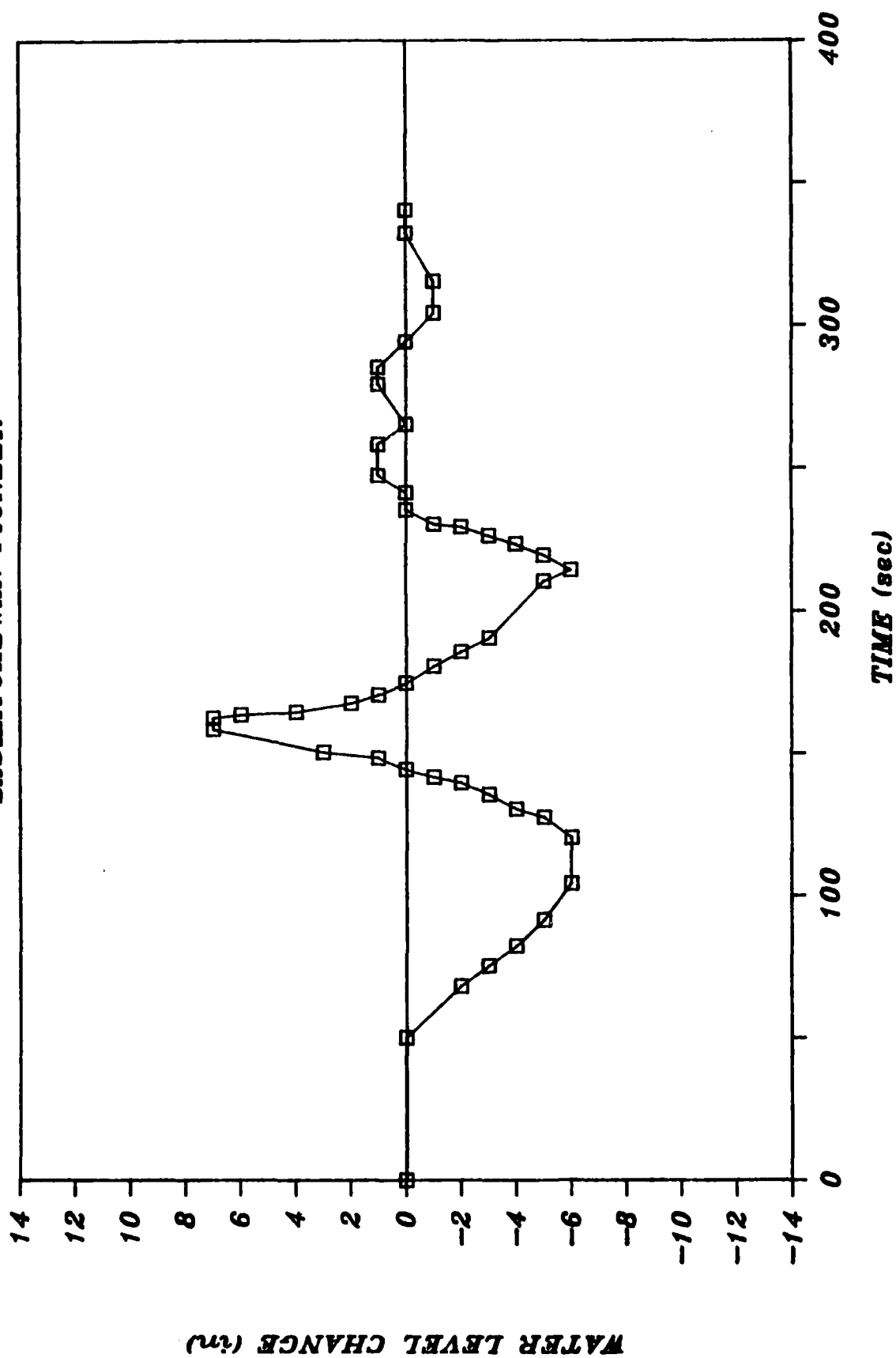
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	28.0	0.0
2	50.0	28.0	0.0
3	68.0	26.0	-2.0
4	75.0	25.0	-3.0
5	82.0	24.0	-4.0
6	91.0	23.0	-5.0
7	104.0	22.0	-6.0
8	120.0	22.0	-6.0
9	127.0	23.0	-5.0
10	130.0	24.0	-4.0
11	135.0	25.0	-3.0
12	139.0	26.0	-2.0
13	141.0	27.0	-1.0
14	144.0	28.0	0.0
15	148.0	29.0	1.0
16	150.0	31.0	3.0
17	158.0	35.0	7.0
18	162.0	35.0	7.0
19	163.0	34.0	6.0
20	164.0	32.0	4.0

NAME OF SECTION NINE MILE

ooo

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	167.0	30.0	2.0
22	170.0	29.0	1.0
23	174.0	28.0	0.0
24	180.0	27.0	-1.0
25	185.0	26.0	-2.0
26	190.0	25.0	-3.0
27	210.0	23.0	-5.0
28	214.0	22.0	-6.0
29	219.0	23.0	-5.0
30	223.0	24.0	-4.0
31	226.0	25.0	-3.0
32	229.0	26.0	-2.0
33	230.0	27.0	-1.0
34	235.0	28.0	0.0
35	241.0	28.0	0.0
36	247.0	29.0	1.0
37	258.0	29.0	1.0
38	265.0	28.0	0.0
39	279.0	29.0	1.0
40	285.0	29.0	1.0
41	294.0	28.0	0.0
42	304.0	27.0	-1.0
43	315.0	27.0	-1.0
44	332.0	28.0	0.0
45	340.0	28.0	0.0

NINE MILE (red)
SASKATCHEWAN PIONEER



DRAWDOWN DATA

NAME OF SECTION NINE MILE

DATE OF OBSERVATION 5/22/85

VESSEL NAME TAURANTAU

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 24

VESSEL SPEED in feet/sec. = 13.04

BOW ON TIME in sec = 124

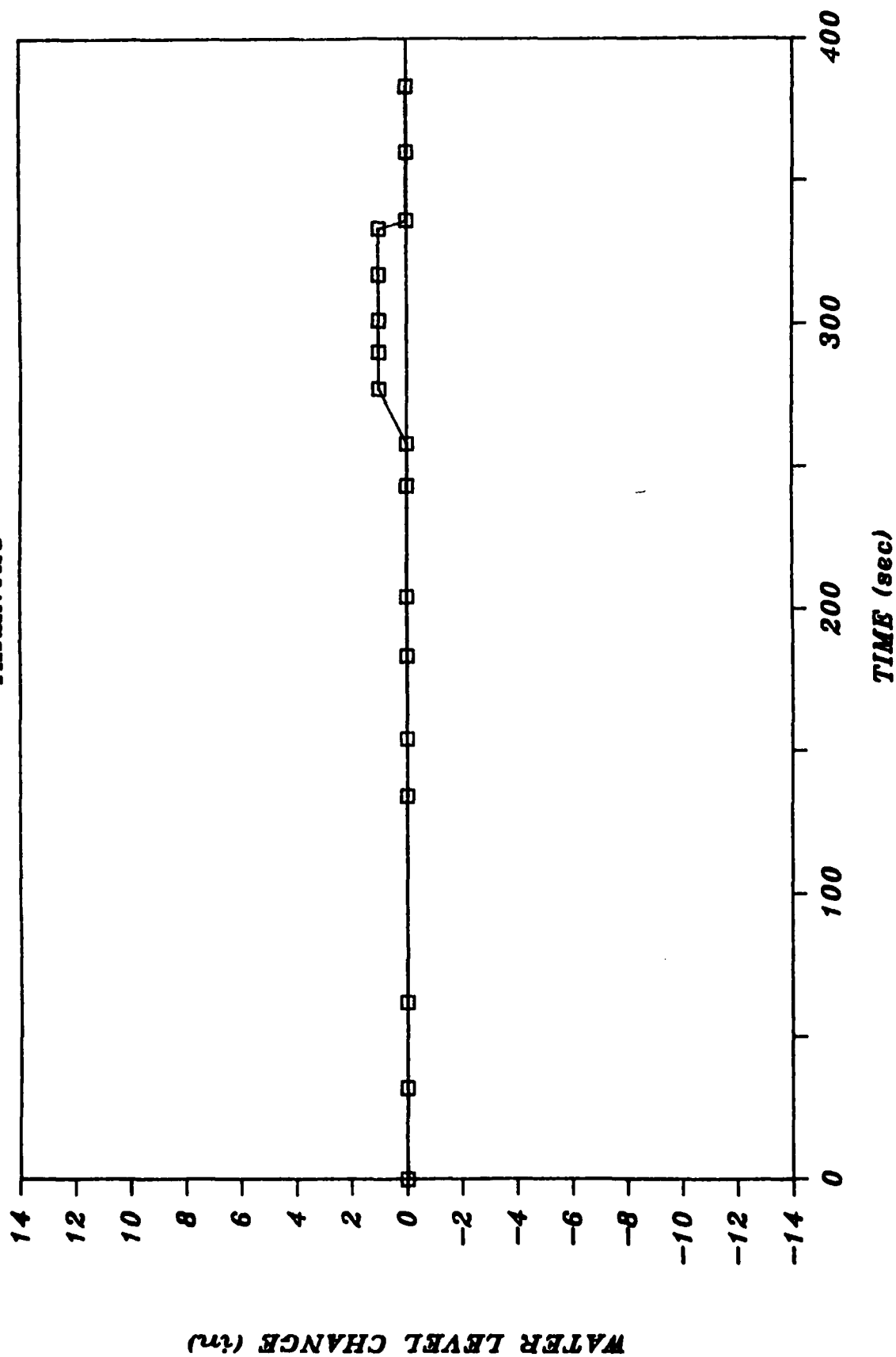
STERN ON TIME in sec = 180

DISTANCE TO STAFF GAUGE from green side in feet = 250

BACKGROUND READING in inches = 18

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	18.0	0.0
2	32.0	18.0	0.0
3	62.0	18.0	0.0
4	134.0	18.0	0.0
5	154.0	18.0	0.0
6	183.0	18.0	0.0
7	204.0	18.0	0.0
8	243.0	18.0	0.0
9	258.0	18.0	0.0
10	277.0	19.0	1.0
11	290.0	19.0	1.0
12	301.0	19.0	1.0
13	317.0	19.0	1.0
14	333.0	19.0	1.0
15	336.0	18.0	0.0
16	360.0	18.0	0.0
17	383.0	18.0	0.0

NINE MILE (green)
TARANTAU



NAME OF SECTION **NINE MILE**

DATE OF OBSERVATION 5/22/85

VESSEL NAME TAURANTAU

DIRECTION	DOWNBOUND
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 24

VESSEL SPEED in feet/sec. = 13.04

BOW ON TIME in sec = 124

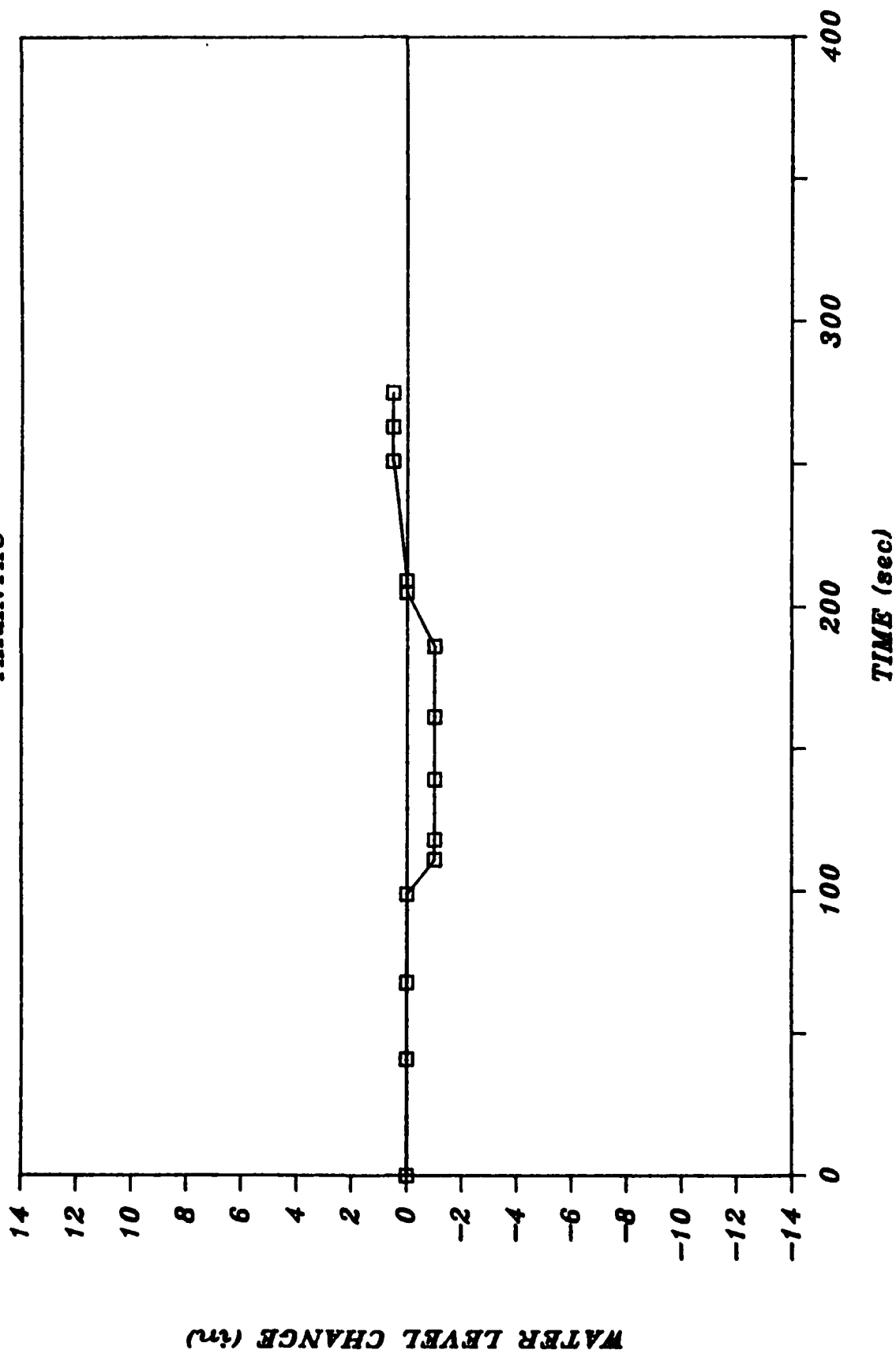
STERN ON TIME in sec = 180

DISTANCE TO STAFF GAUGE from green side in feet = 5800

BACKGROUND READING in inches = 27

BD24

NINE MILE (red)
TARANTAU



DRAWDOWN DATA

NAME OF SECTION NINE MILE
#####

DATE OF OBSERVATION 5/22/85

VESSEL NAME HERBERT C. JACKSON

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 690

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 27.5

VESSEL SPEED in feet/sec. = 14.08

BOW ON TIME in sec = 64

STERN ON TIME in sec = 113

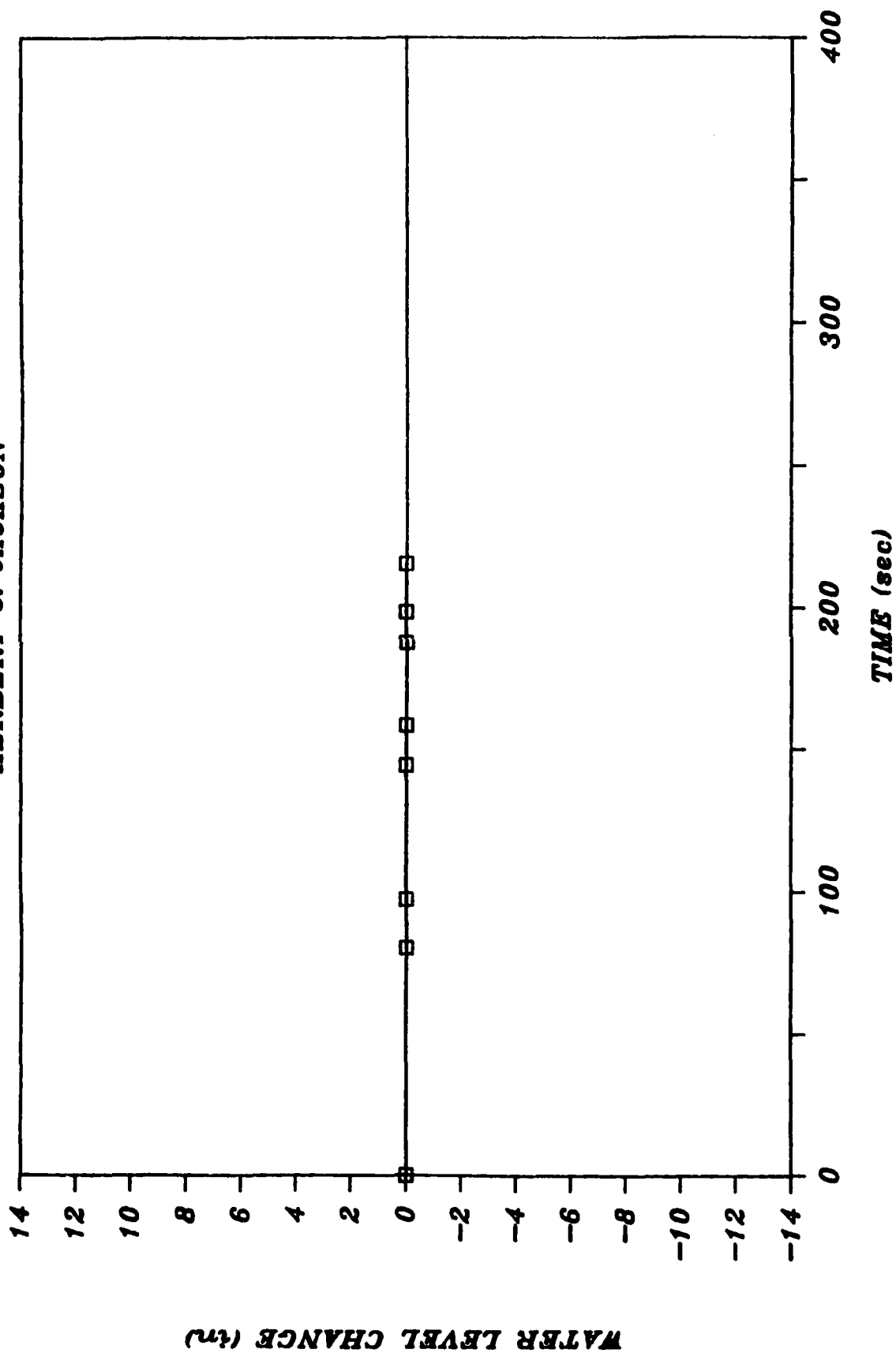
DISTANCE TO STAFF GAUGE from green side in feet = 250

BACKGROUND READING in inches = 18

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	18.0	0.0
2	80.0	18.0	0.0
3	97.0	18.0	0.0
4	144.0	18.0	0.0
5	158.0	18.0	0.0
6	187.0	18.0	0.0
7	198.0	18.0	0.0
8	215.0	18.0	0.0

NINE MILE (green)

HERBERT C. JACKSON



DRAWDOWN DATA

NAME OF SECTION NINE MILE
#####

DATE OF OBSERVATION 5/22/85

VESSEL NAME HERBERT C. JACKSON

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 690

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 27.5

VESSEL SPEED in feet/sec. = 14.08

BOW ON TIME in sec = 64

STERN ON TIME in sec = 113

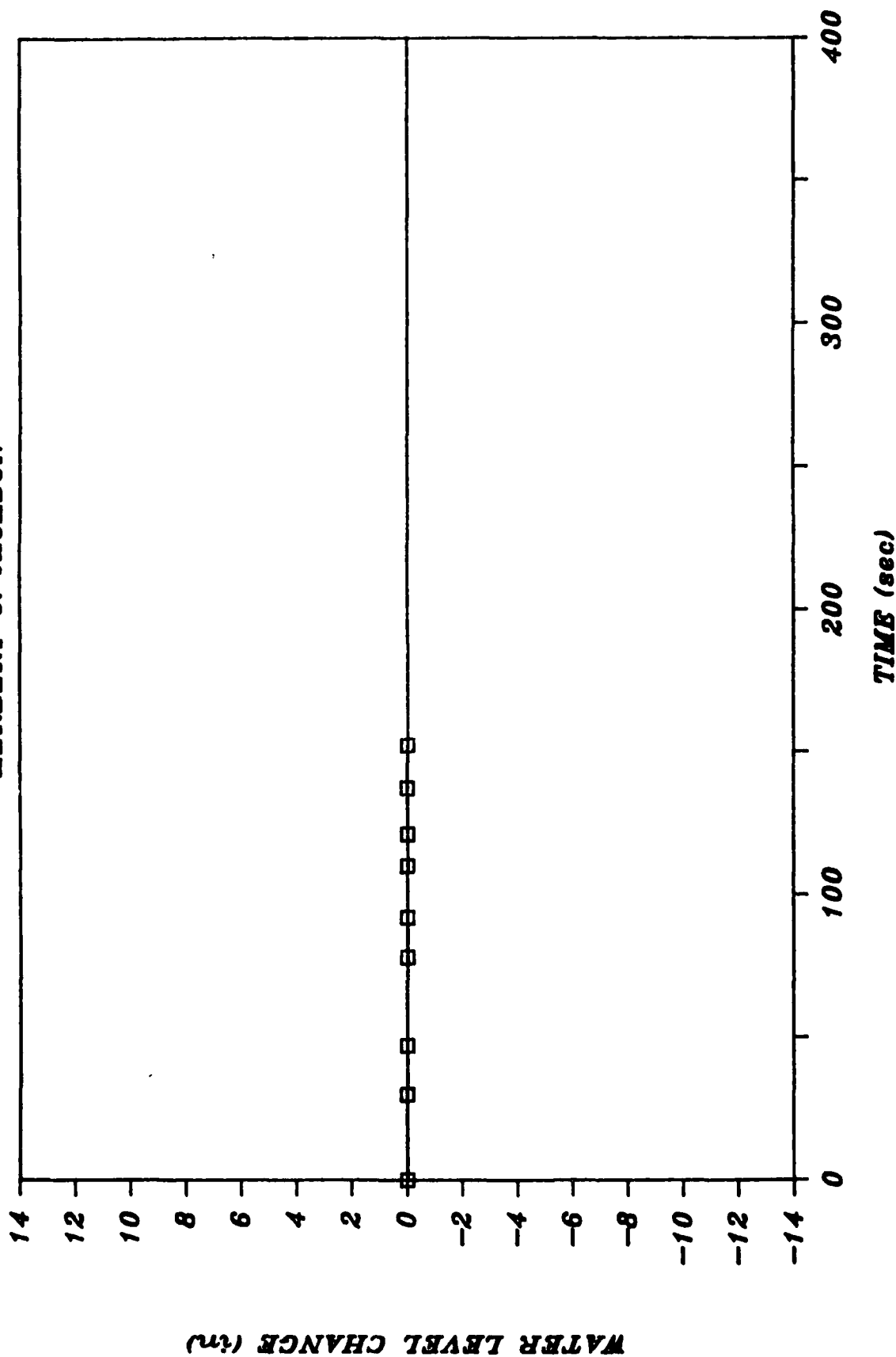
DISTANCE TO STAFF GAUGE from green side in feet = 5800

BACKGROUND READING in inches = 27

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	27.0	0.0
2	30.0	27.0	0.0
3	47.0	27.0	0.0
4	78.0	27.0	0.0
5	92.0	27.0	0.0
6	110.0	27.0	0.0
7	121.0	27.0	0.0
8	137.0	27.0	0.0
9	152.0	27.0	0.0

NINE MILE (red)

HERBERT C. JACKSON



DRAWDOWN DATA

NAME OF SECTION NINE MILE

DATE OF OBSERVATION 5/22/85

VESSEL NAME JENSEN STAR

DIRECTION UPBOUND .

VESSEL LENGTH in feet = 404

VESSEL BEAM in feet = 60

VESSEL DRAFT in feet = 14.5

VESSEL SPEED in feet/sec. = 17.57

BOW ON TIME in sec = 49

STERN ON TIME in sec = 72

DISTANCE TO STAFF GAUGE from green side in feet = 5800

BACKGROUND READING in inches = 27

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	27.0	0.0
2	52.0	27.0	0.0
3	77.0	27.0	0.0
4	83.0	26.5	-0.5
5	88.0	26.0	-1.0
6	93.0	25.0	-2.0
7	100.0	24.0	-3.0
8	112.0	24.0	-3.0
9	129.0	26.0	-1.0
10	131.0	27.0	0.0
11	140.0	28.0	1.0
12	146.0	29.0	2.0
13	165.0	29.0	2.0
14	178.0	28.0	1.0
15	183.0	28.0	1.0
16	189.0	27.0	0.0
17	198.0	26.0	-1.0
18	206.0	25.0	-2.0
19	211.0	25.0	-2.0
20	218.0	26.0	-1.0

DRAWDOWN DATA (continued)

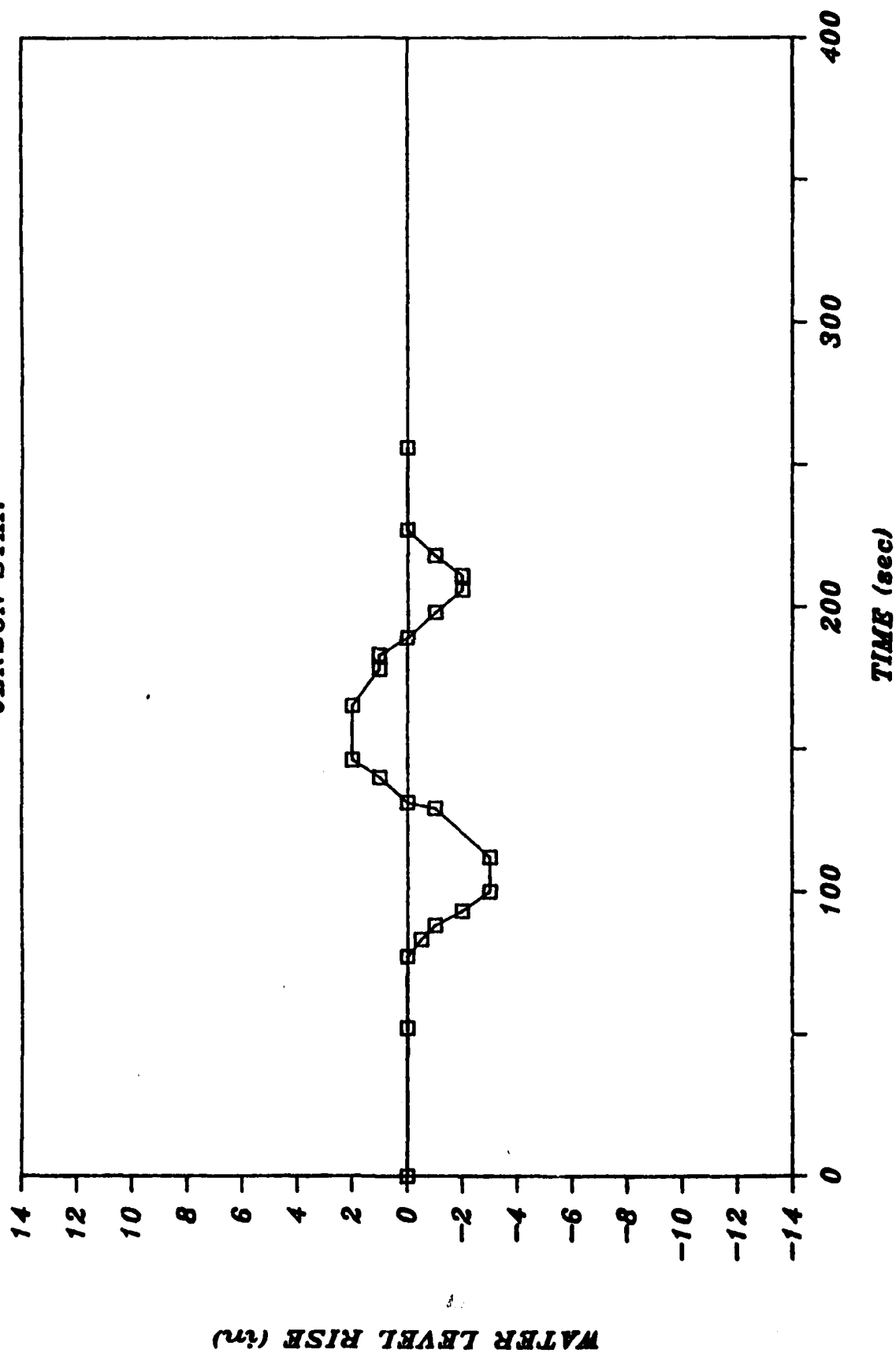
NAME OF SECTION	NINE MILE
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

[illegible]

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	227.0	27.0	0.0
22	256.0	27.0	0.0

NINE MILE (red)

JENSON STAR



DRAWDOWN DATA

NAME OF SECTION NINE MILE
#####

DATE OF OBSERVATION 5/23/85

VESSEL NAME SIMCOE

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 25.5

VESSEL SPEED in feet/sec. = 13.27

BOW ON TIME in sec = 99

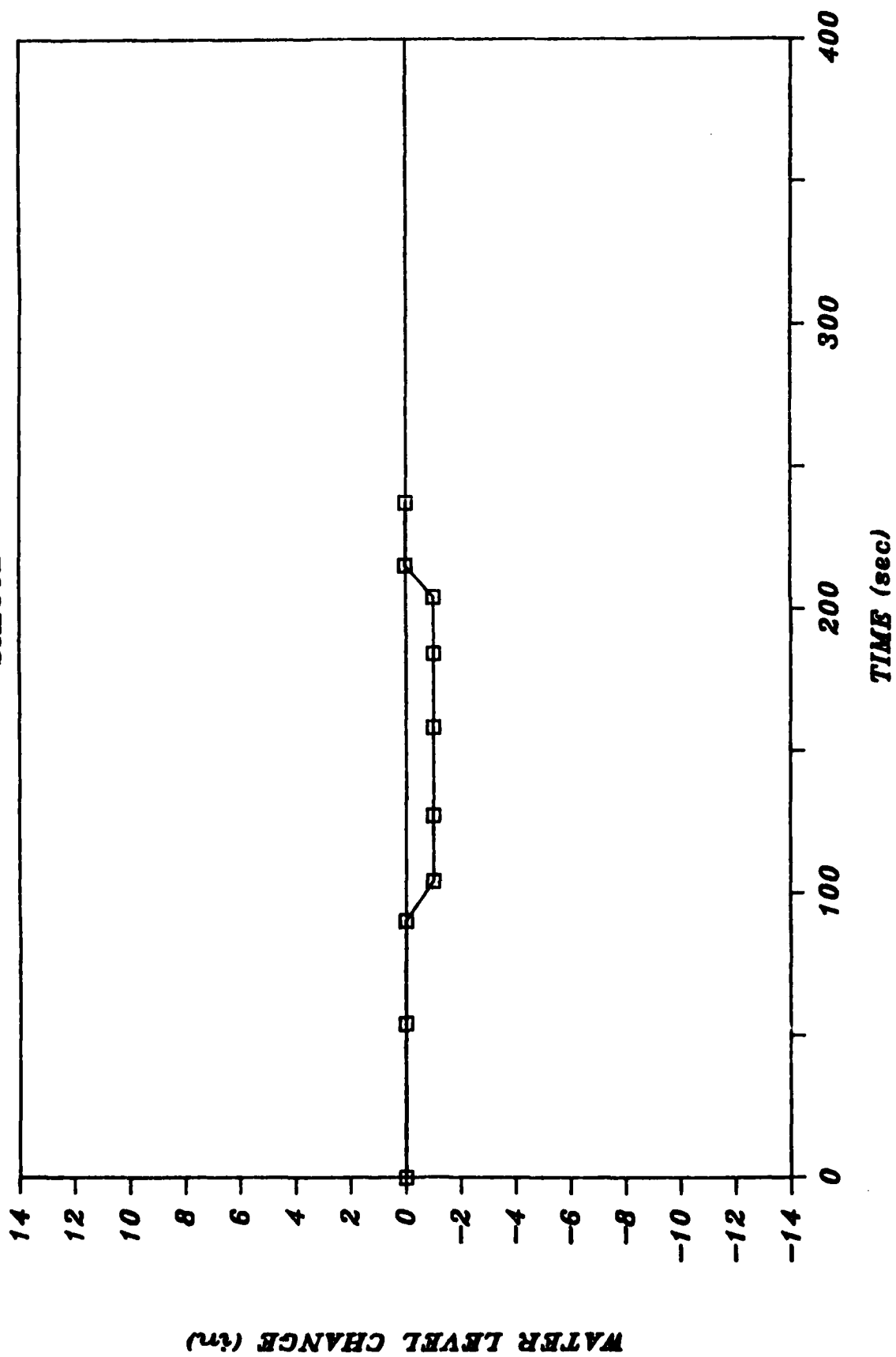
STERN ON TIME in sec = 154

DISTANCE TO STAFF GAUGE from green side in feet = 5800

BACKGROUND READING in inches = 27

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	27.0	0.0
2	54.0	27.0	0.0
3	90.0	27.0	0.0
4	104.0	26.0	-1.0
5	127.0	26.0	-1.0
6	158.0	26.0	-1.0
7	184.0	26.0	-1.0
8	204.0	26.0	-1.0
9	215.0	27.0	0.0
10	237.0	27.0	0.0

NINE MILE (red) SIMCOE



DRAWDOWN DATA

NAME OF SECTION NINE MILE

DATE OF OBSERVATION 5/23/85

VESSEL NAME J.A.W. IGLEHART

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 502

VESSEL BEAM in feet = 68

VESSEL DRAFT in feet =

VESSEL SPEED in feet/sec. = 13.94

BOW ON TIME in sec = 125

STERN ON TIME in sec = 161

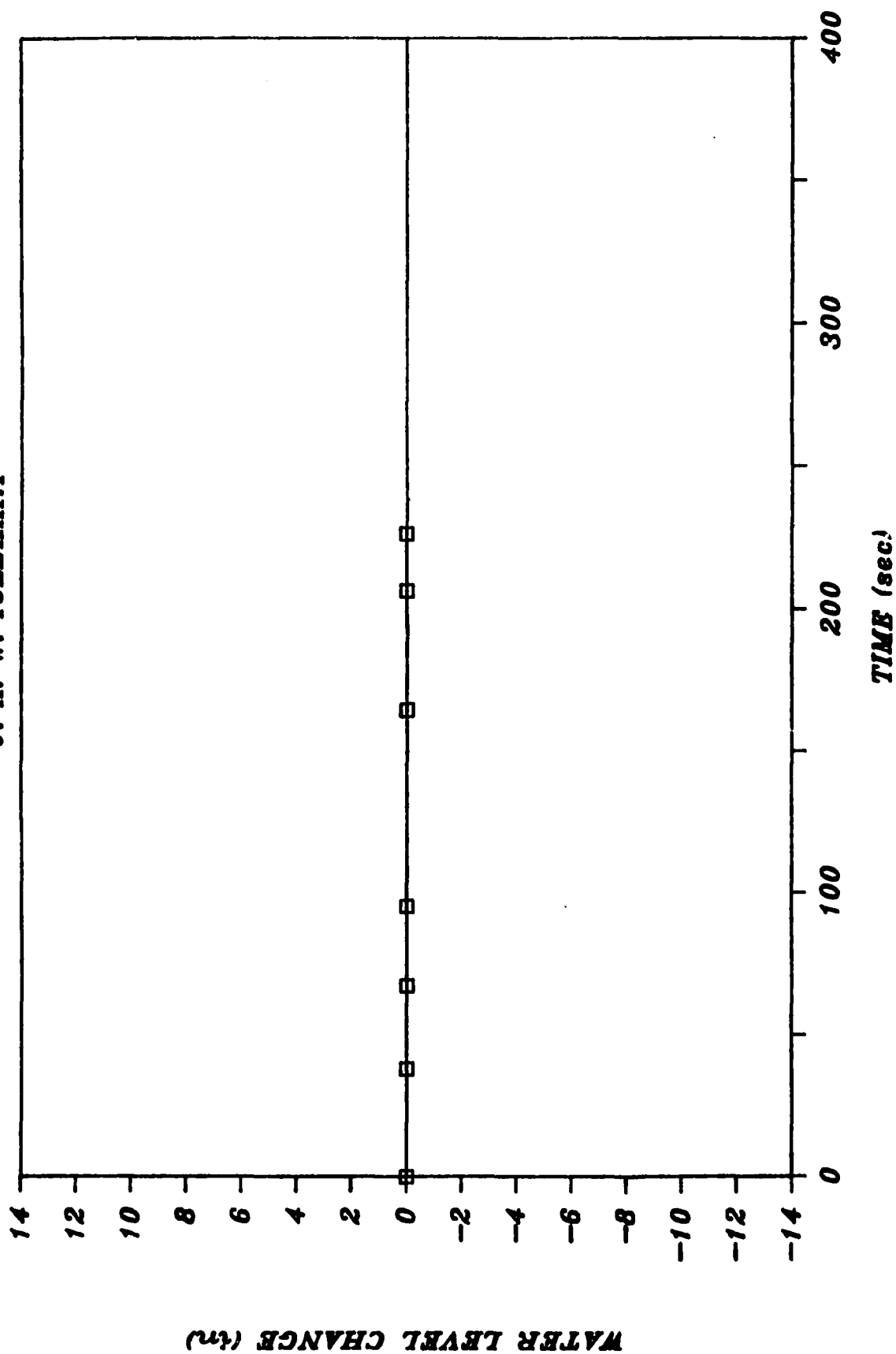
DISTANCE TO STAFF GAUGE from green side in feet = 5800

BACKGROUND READING in inches = 27

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	27.0	0.0
2	38.0	27.0	0.0
3	67.0	27.0	0.0
4	95.0	27.0	0.0
5	164.0	27.0	0.0
6	206.0	27.0	0.0
7	226.0	27.0	0.0

NINE MILE (red)

J. A. W. IGLEHART



DRAWDOWN DATA

NAME OF SECTION	NINE MILE
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

DATE OF OBSERVATION **5/23/85**

VESSEL NAME **ALGOLAKE/CANADIAN TRANSPORT**

DIRECTION	DOWNBOUND/UPBOUND
-----------	-------------------

VESSEL LENGTH in feet = 730/730

VESSEL BEAM in feet = 75/75.67

VESSEL DRAFT in feet = 28/18.04

VESSEL SPEED in feet/sec. = 13.27/12.37

BOW ON TIME in sec = 132/152

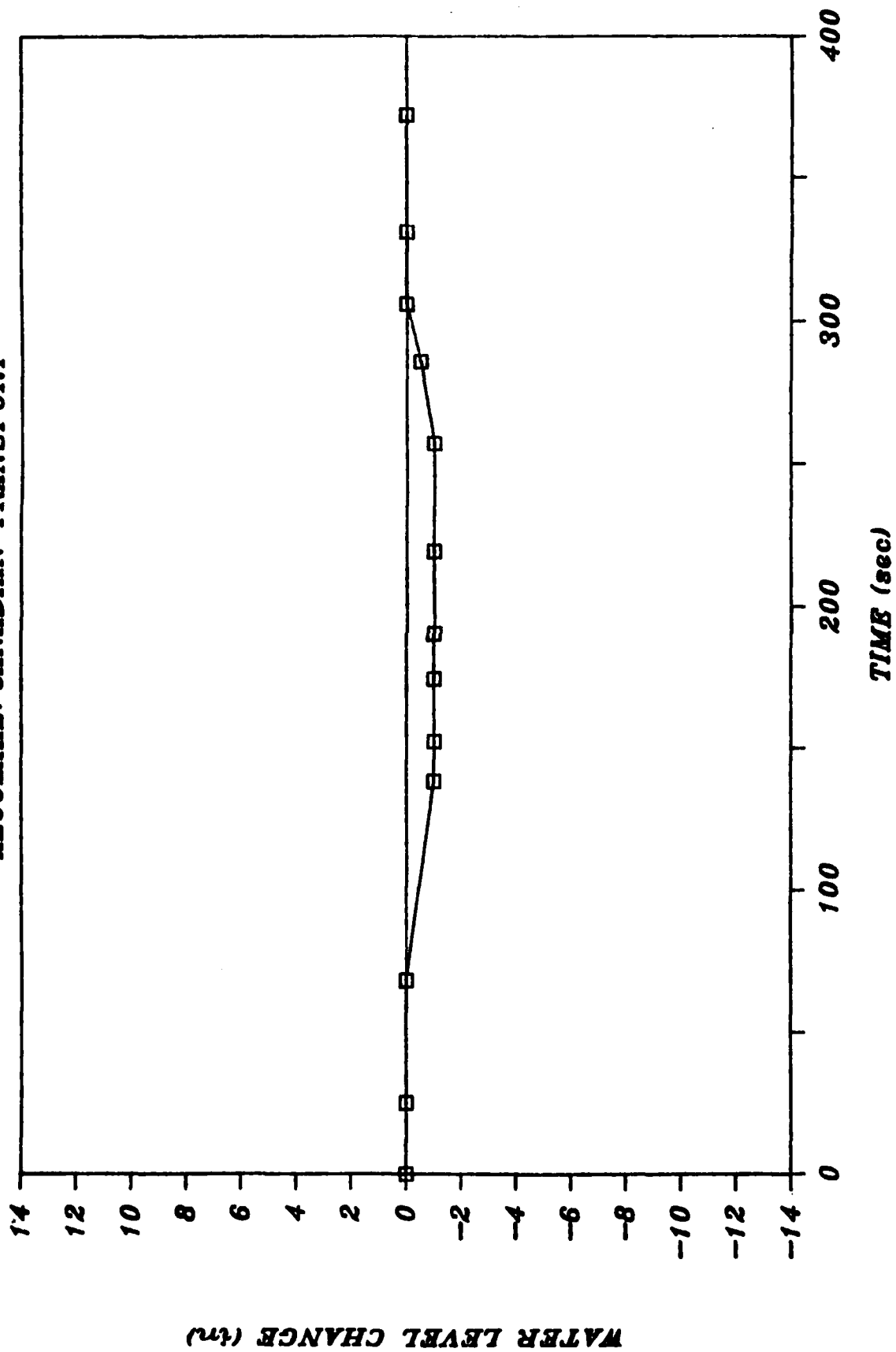
STERN ON TIME in sec = 187/211

DISTANCE TO STAFF GAUGE from green side in feet = 250

BACKGROUND READING in inches = 14

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	14.0	0.0
2	25.0	14.0	0.0
3	68.0	14.0	0.0
4	138.0	13.0	-1.0
5	152.0	13.0	-1.0
6	174.0	13.0	-1.0
7	190.0	13.0	-1.0
8	219.0	13.0	-1.0
9	257.0	13.0	-1.0
10	286.0	13.5	-0.5
11	306.0	14.0	0.0
12	331.0	14.0	0.0
13	372.0	14.0	0.0

**NINE MILE (green)
ALCOLAKE/CANADIAN TRANSPORT**



DRAWDOWN DATA

NAME OF SECTION NINE MILE

DATE OF OBSERVATION 5/23/85

VESSEL NAME ALGOLAKE/CANADIAN TRANSPORT

DIRECTION DOUNBOUND/UPBOUND

VESSEL LENGTH in feet = 730/730

VESSEL BEAM in feet = 75/75.67

VESSEL DRAFT in feet = 28/18.04

VESSEL SPEED in feet/sec. = 13.27/12.37

BOW ON TIME in sec = 132/152

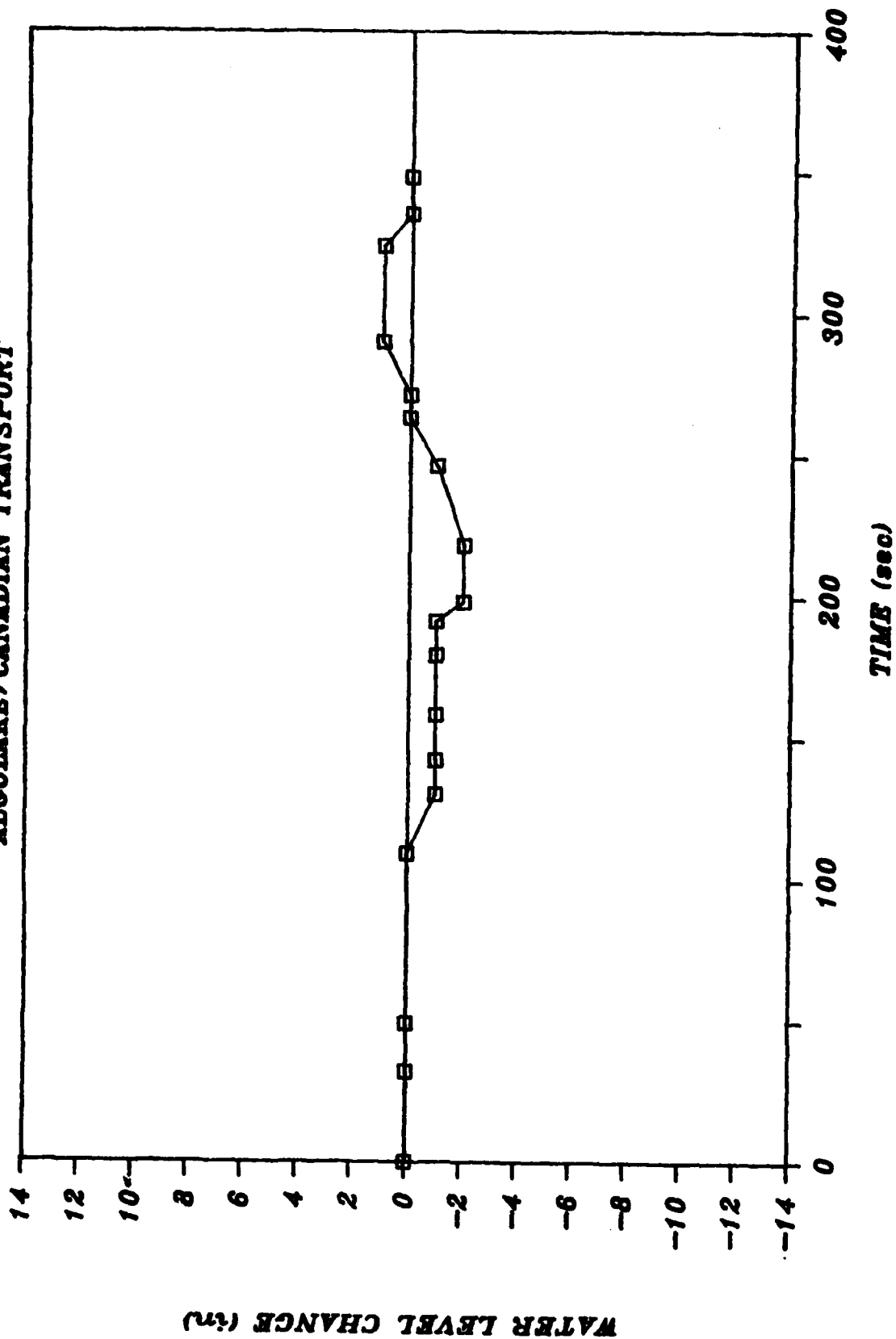
STERN ON TIME in sec = 187/211

DISTANCE TO STAFF GAUGE from green side in feet = 5800

BACKGROUND READING in inches = 26

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	26.0	0.0
2	32.0	26.0	0.0
3	49.0	26.0	0.0
4	109.0	26.0	0.0
5	130.0	25.0	-1.0
6	142.0	25.0	-1.0
7	158.0	25.0	-1.0
8	179.0	25.0	-1.0
9	191.0	25.0	-1.0
10	198.0	24.0	-2.0
11	218.0	24.0	-2.0
12	246.0	25.0	-1.0
13	263.0	26.0	0.0
14	271.0	26.0	0.0
15	290.0	27.0	1.0
16	324.0	27.0	1.0
17	335.0	26.0	0.0
18	348.0	26.0	0.0

NINE MILE (red)
ALGO LAKE/CANADIAN TRANSPORT



 DRAWDOWN DATA

NAME OF SECTION NINE MILE

DATE OF OBSERVATION 5/23/85

VESSEL NAME BURNS HARBOR

DIRECTION UBOUND

VESSEL LENGTH in feet = 1000

VESSEL BEAM in feet = 105

VESSEL DRAFT in feet = 19

VESSEL SPEED in feet/sec. = 12.35

BOW ON TIME in sec = 102

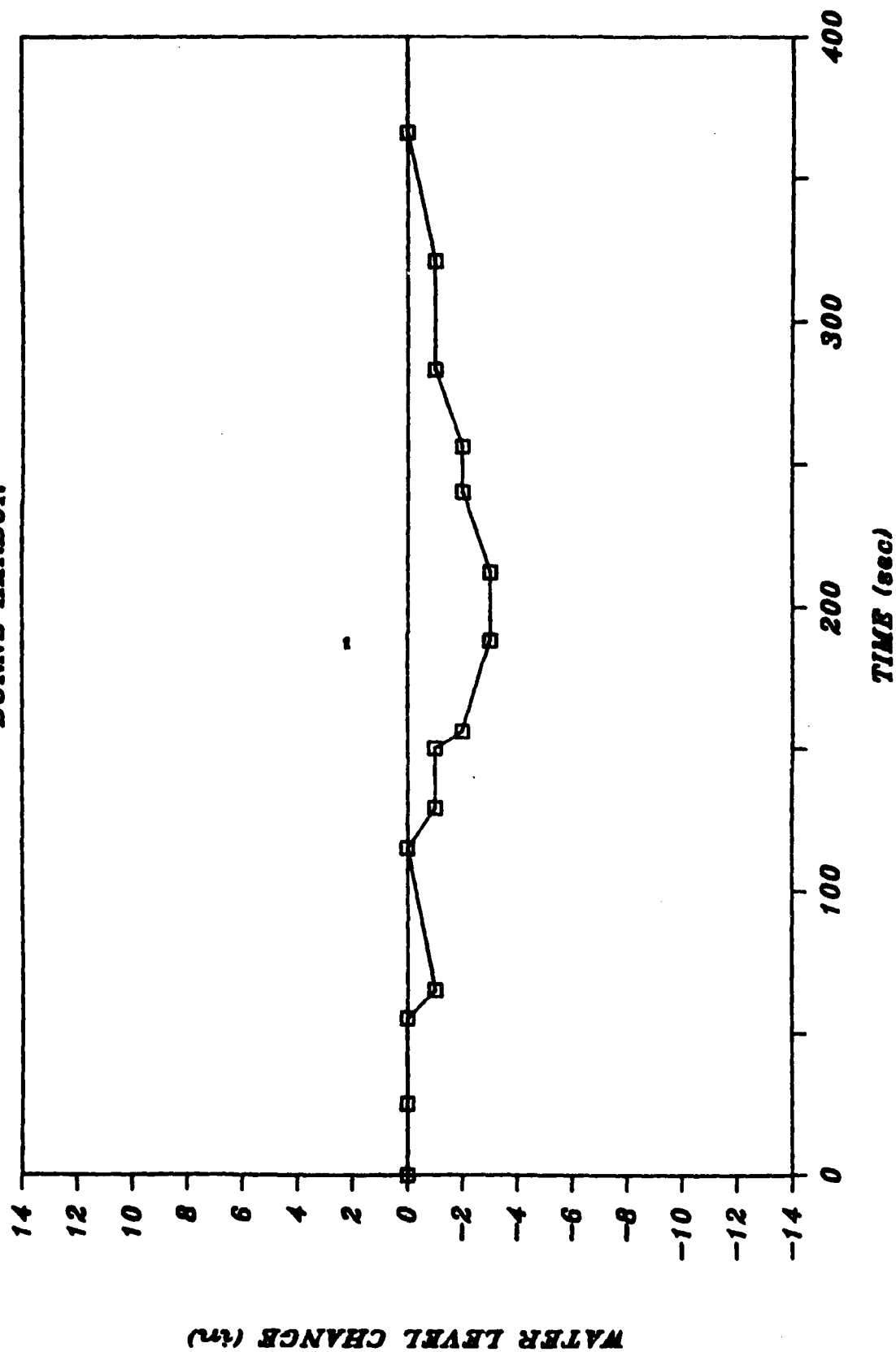
STERN ON TIME in sec = 183

DISTANCE TO STAFF GAUGE from green side in feet = 250

BACKGROUND READING in inches = 13

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	13.0	0.0
2	25.0	13.0	0.0
3	55.0	13.0	0.0
4	65.0	12.0	-1.0
5	115.0	13.0	0.0
6	129.0	12.0	-1.0
7	150.0	12.0	-1.0
8	156.0	11.0	-2.0
9	188.0	10.0	-3.0
10	212.0	10.0	-3.0
11	240.0	11.0	-2.0
12	256.0	11.0	-2.0
13	283.0	12.0	-1.0
14	321.0	12.0	-1.0
15	366.0	13.0	0.0

NINE MILE (green)
BURNS HARBOR



 DRAWDOWN DATA

NAME OF SECTION NINE MILE

DATE OF OBSERVATION 5/23/85

VESSEL NAME BURNS HARBOR

DIRECTION UPBOUND

VESSEL LENGTH in feet = 1000

VESSEL BEAM in feet = 105

VESSEL DRAFT in feet = 19

VESSEL SPEED in feet/sec. = 12.35

BOW ON TIME in sec = 102

STERN ON TIME in sec = 183

DISTANCE TO STAFF GAUGE from green side in feet = 5800

BACKGROUND READING in inches = 26

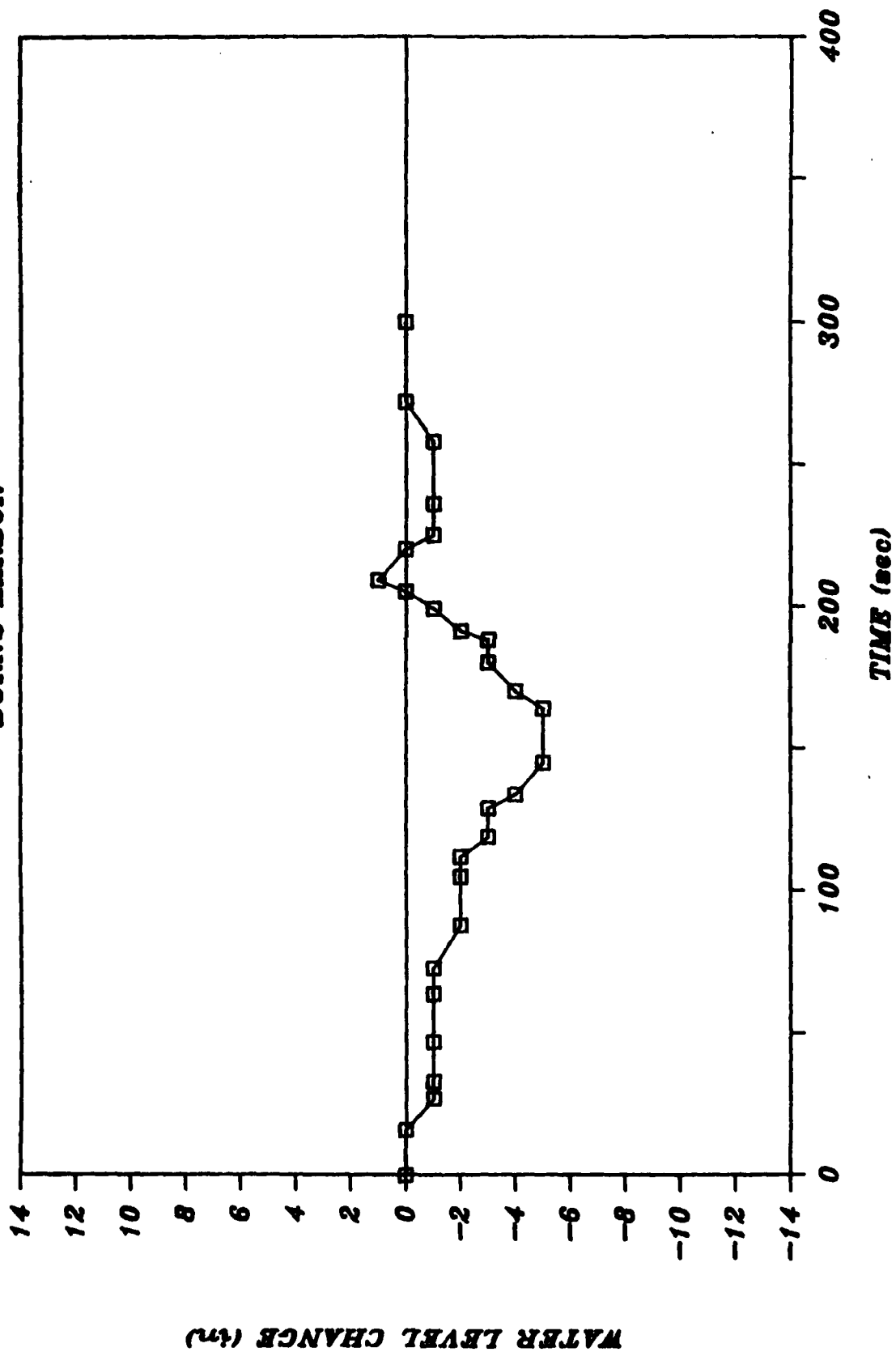
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	26.0	0.0
2	16.0	26.0	0.0
3	27.0	25.0	-1.0
4	33.0	25.0	-1.0
5	47.0	25.0	-1.0
6	64.0	25.0	-1.0
7	73.0	25.0	-1.0
8	88.0	24.0	-2.0
9	105.0	24.0	-2.0
10	112.0	24.0	-2.0
11	119.0	23.0	-3.0
12	129.0	23.0	-3.0
13	134.0	22.0	-4.0
14	145.0	21.0	-5.0
15	164.0	21.0	-5.0
16	170.0	22.0	-4.0
17	180.0	23.0	-3.0
18	188.0	23.0	-3.0
19	191.0	24.0	-2.0
20	199.0	25.0	-1.0

DRAWDOWN DATA (continued)

NAME OF SECTION NINE MILE

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	205.0	26.0	0.0
22	209.0	27.0	1.0
23	220.0	26.0	0.0
24	225.0	25.0	-1.0
25	236.0	25.0	-1.0
26	258.0	25.0	-1.0
27	272.0	26.0	0.0
28	300.0	26.0	0.0

NINE MILE (red)
BURNS HARBOR



EAST CELL DOCK

 DRAWDOWN DATA

NAME OF SECTION EAST CELL DOCK

DATE OF OBSERVATION 11/12/84

VESSEL NAME SELKIRK SETTLER

DIRECTION UPBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75.5

VESSEL DRAFT in feet = 24

VESSEL SPEED in feet/sec. = 14.0

BOW ON TIME in sec = 90

STERN ON TIME in sec = 142

DISTANCE TO STAFF GAUGE from green side in feet = 2975(R-BE)

BACKGROUND READING in inches = 11

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	11.0	0.0
2	2.0	11.0	0.0
3	9.0	11.0	0.0
4	17.0	11.0	0.0
5	21.0	11.0	0.0
6	29.0	11.0	0.0
7	37.0	11.0	0.0
8	43.0	11.0	0.0
9	51.0	11.0	0.0
10	57.0	11.0	0.0
11	62.0	11.0	0.0
12	64.0	10.5	-0.5
13	67.0	10.5	-0.5
14	75.0	10.5	-0.5
15	77.0	10.0	-1.0
16	80.0	10.0	-1.0
17	85.0	10.0	-1.0
18	91.0	10.0	-1.0
19	93.0	9.5	-1.5
20	95.0	9.5	-1.5

DRAWDOWN DATA (continued)

NAME OF SECTION EAST CELL DOCK

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	99.0	9.5	-1.5
22	111.0	9.5	-1.5
23	113.0	9.5	-1.5
24	115.0	9.5	-1.5
25	120.0	9.5	-1.5
26	134.0	9.0	-2.0
27	153.0	9.0	-2.0
28	157.0	8.5	-2.5
29	160.0	8.5	-2.5
30	163.0	8.0	-3.0
31	175.0	8.0	-3.0
32	182.0	7.5	-3.5
33	185.0	7.5	-3.5
34	188.0	8.0	-3.0
35	189.0	8.0	-3.0
36	191.0	7.5	-3.5
37	195.0	7.5	-3.5
38	199.0	8.0	-3.0
39	202.0	8.0	-3.0
40	205.0	8.5	-2.5
41	220.0	8.5	-2.5
42	231.0	10.0	-1.0
43	237.0	11.0	0.0
44	245.0	11.5	0.5
45	248.0	12.0	1.0
46	259.0	12.0	1.0
47	260.0	11.5	0.5
48	263.0	11.0	0.0
49	267.0	10.5	-0.5
50	270.0	10.5	-0.5
51	275.0	10.0	-1.0
52	277.0	10.0	-1.0
53	280.0	9.5	-1.5
54	281.0	9.0	-2.0
55	283.0	9.0	-2.0
56	287.0	8.5	-2.5
57	290.0	8.0	-3.0
58	292.0	8.0	-3.0
59	294.0	7.5	-3.5
60	296.0	7.5	-3.5
61	298.0	7.0	-4.0
62	302.0	7.0	-4.0
63	306.0	6.5	-4.5
64	313.0	7.5	-3.5

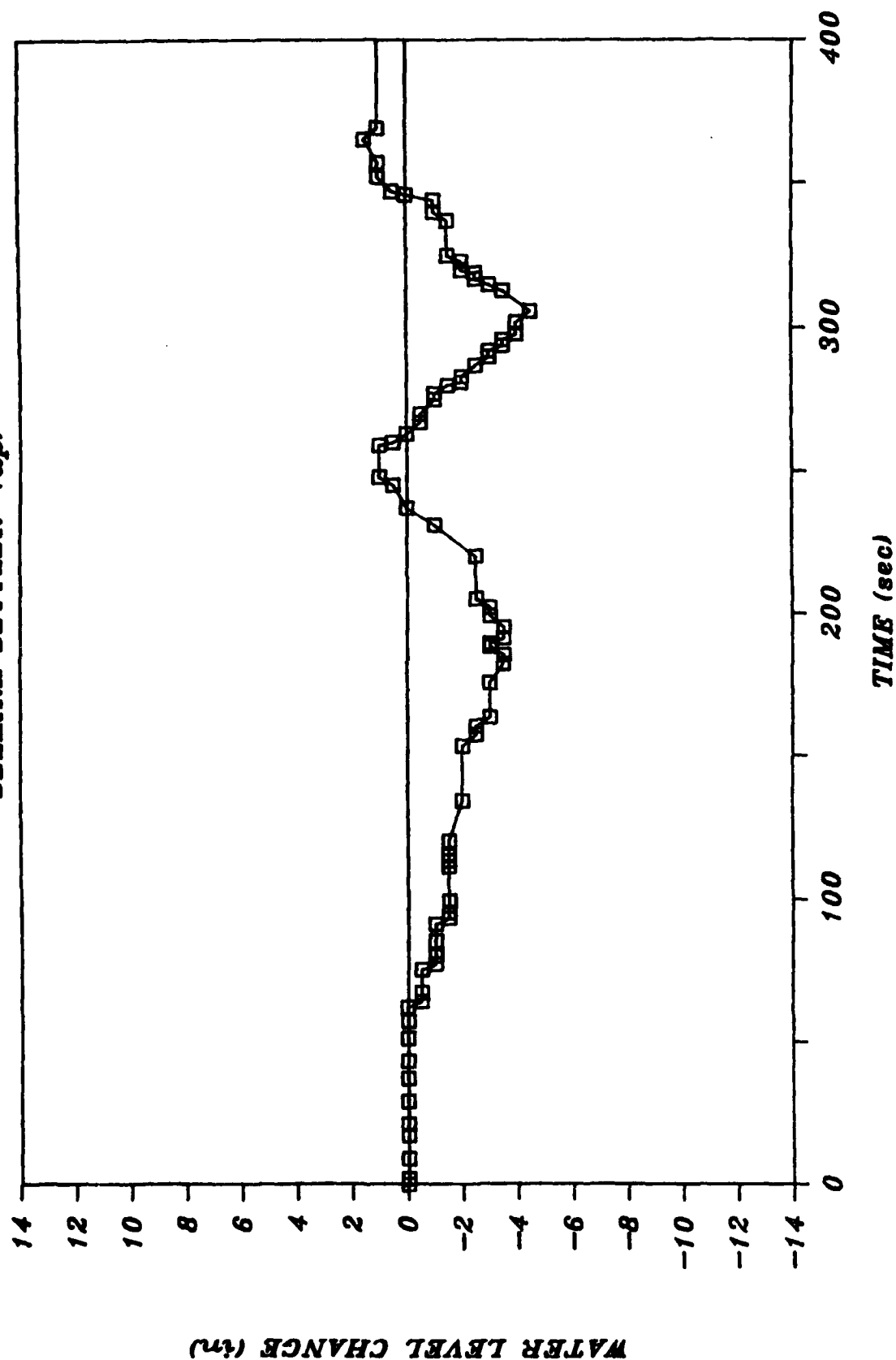
DRAWDOWN DATA (continued)

NAME OF SECTION EAST CELL DOCK

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
65	315.0	8.0	-3.0
66	317.0	8.5	-2.5
67	319.0	8.5	-2.5
68	320.0	9.0	-2.0
69	323.0	9.0	-2.0
70	325.0	9.5	-1.5
71	337.0	9.5	-1.5
72	340.0	10.0	-1.0
73	344.0	10.0	-1.0
74	346.0	11.0	0.0
75	347.0	11.5	0.5
76	352.0	12.0	1.0
77	357.0	12.0	1.0
78	365.0	12.5	1.5
79	369.0	12.0	1.0
80	404.0	12.0	1.0
81	407.0	11.5	0.5
82	422.0	11.5	0.5
83	424.0	11.0	0.0
84	426.0	11.0	0.0
85	428.0	10.0	-1.0
86	437.0	10.0	-1.0
87	441.0	9.5	-1.5
88	444.0	9.0	-2.0
89	455.0	9.0	-2.0
90	461.0	9.5	-1.5
91	467.0	10.0	-1.0
92	470.0	11.0	0.0
93	507.0	11.0	0.0

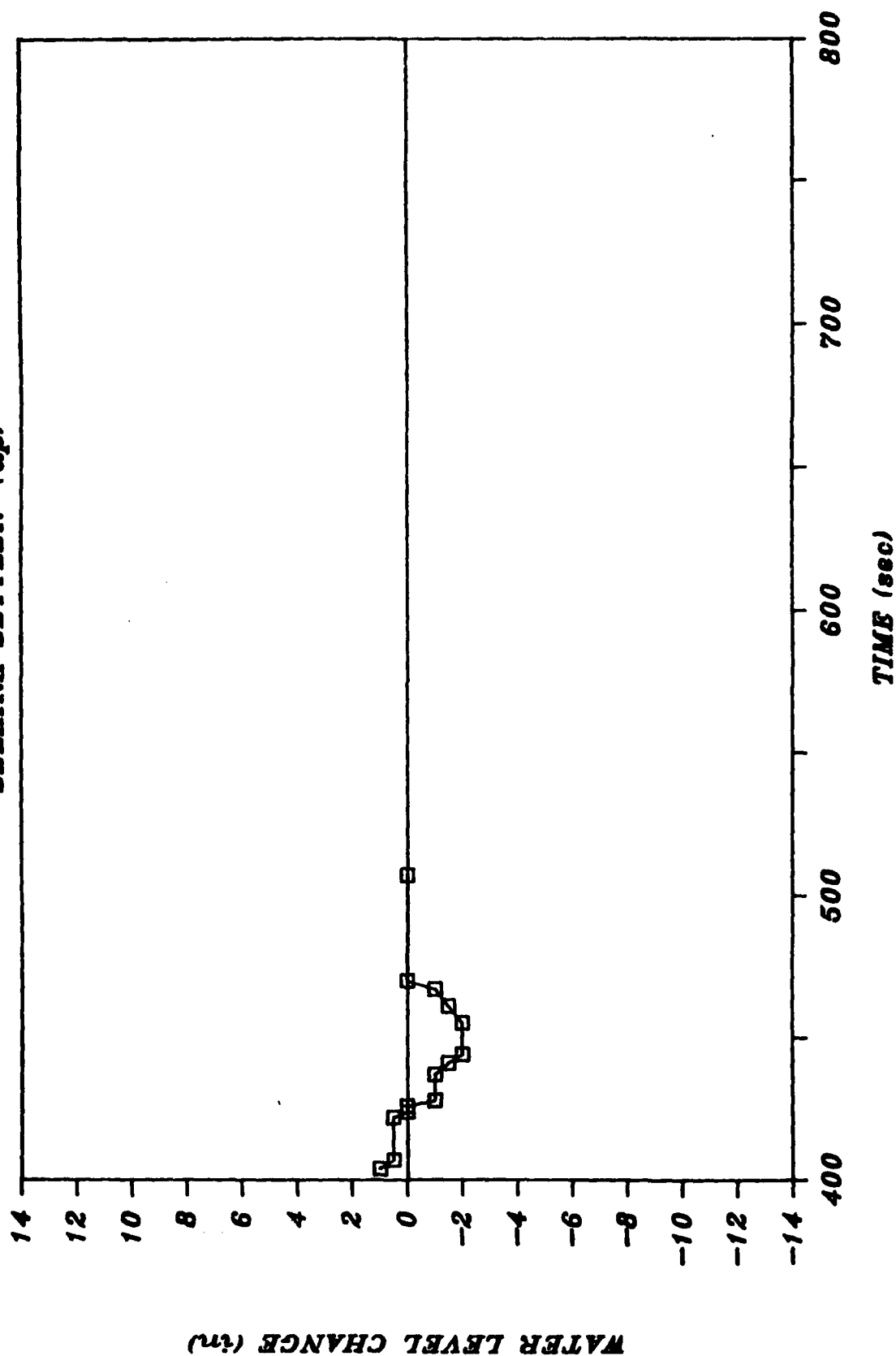
EAST CELL DOCK 11/12/84

SELKIRK SETTLER (wp)



EAST CELL DOCK 11/12/84

SELKIRK SETTLER (wp)



DRAWDOWN DATA

NAME OF SECTION EAST CELL DOCK

DATE OF OBSERVATION 11/12/84

VESSEL NAME SELKIRK SETTLER

DIRECTION UPBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75.5

VESSEL DRAFT in feet = 24

VESSEL SPEED in feet/sec. = 14.0

BOW ON TIME in sec = 66.2

STERN ON TIME in sec = 118.2

DISTANCE TO STAFF GAUGE from green side in feet = 3005(R-AF)

BACKGROUND READING in inches = 18

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	23.0	18.0	0.0
2	40.0	17.5	-0.5
3	43.0	17.5	-0.5
4	47.0	17.0	-1.0
5	56.0	17.0	-1.0
6	65.0	17.0	-1.0
7	66.0	17.0	-1.0
8	68.0	16.5	-1.5
9	73.0	16.0	-2.0
10	77.0	16.0	-2.0
11	84.0	16.0	-2.0
12	91.0	15.5	-2.5
13	96.0	15.5	-2.5
14	101.0	16.0	-2.0
15	107.0	15.5	-2.5
16	118.0	15.5	-2.5
17	122.0	15.0	-3.0
18	124.0	15.0	-3.0
19	132.0	15.0	-3.0
20	137.0	15.0	-3.0

 DRAWDOWN DATA (continued)

NAME OF SECTION EAST CELL DOCK

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	138.0	14.5	-3.5
22	140.0	15.0	-3.0
23	146.0	15.0	-3.0
24	147.0	14.5	-3.5
25	148.0	14.0	-4.0
26	150.0	14.0	-4.0
27	153.0	14.5	-3.5
28	160.0	14.5	-3.5
29	165.0	14.5	-3.5
30	172.0	14.0	-4.0
31	177.0	14.0	-4.0
32	182.0	15.0	-3.0
33	189.0	15.0	-3.0
34	191.0	15.5	-2.5
35	196.0	16.0	-2.0
36	199.0	16.0	-2.0
37	206.0	16.5	-1.5
38	208.0	17.0	-1.0
39	210.0	17.5	-0.5
40	215.0	17.5	-0.5
41	218.0	18.0	0.0
42	222.0	18.5	0.5
43	225.0	18.5	0.5
44	236.0	19.0	1.0
45	243.0	19.0	1.0
46	245.0	19.0	1.0
47	248.0	18.5	0.5
48	266.0	17.0	-1.0
49	270.0	16.5	-1.5
50	281.0	15.5	-2.5
51	285.0	15.0	-3.0
52	289.0	15.0	-3.0
53	291.0	14.0	-4.0
54	294.0	14.0	-4.0
55	298.0	13.5	-4.5
56	303.0	13.5	-4.5
57	306.0	13.0	-5.0
58	308.0	13.5	-4.5
59	310.0	13.5	-4.5
60	313.0	14.0	-4.0
61	316.0	15.0	-3.0
62	319.0	15.0	-3.0
63	320.0	15.5	-2.5
64	326.0	16.0	-2.0

oo

DRAWDOWN DATA (continued)

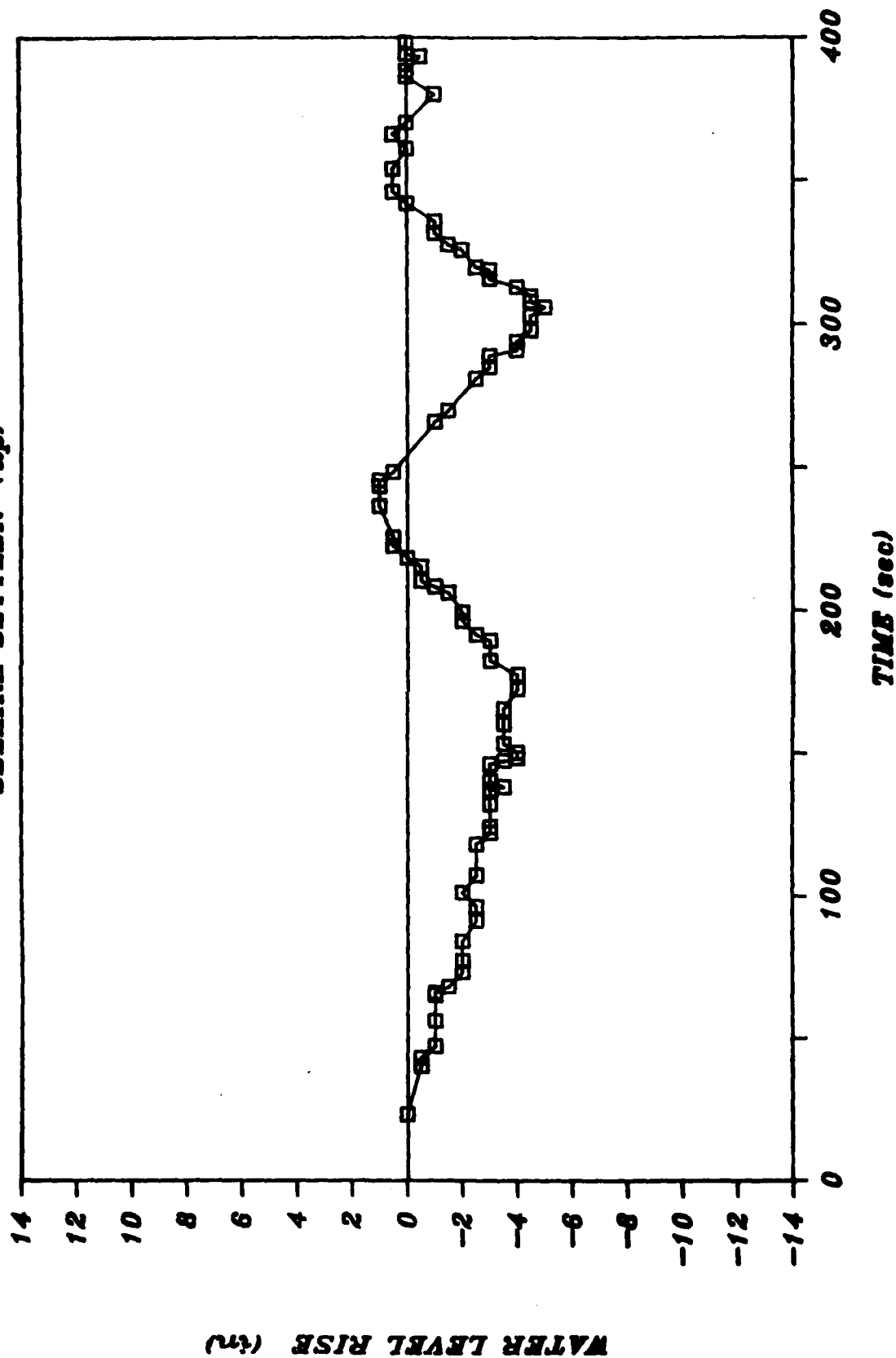
NAME OF SECTION EAST CELL DOCK

oo

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
65	328.0	16.5	-1.5
66	332.0	17.0	-1.0
67	336.0	17.0	-1.0
68	342.0	18.0	0.0
69	346.0	18.5	0.5
70	354.0	18.5	0.5
71	361.0	18.0	0.0
72	366.0	18.5	0.5
73	370.0	18.0	0.0
74	380.0	17.0	-1.0
75	386.0	18.0	0.0
76	388.0	18.0	0.0
77	393.0	17.5	-0.5
78	394.0	18.0	0.0
79	398.0	18.0	0.0
80	404.0	18.0	0.0
81	406.0	18.0	0.0
82	415.0	18.5	0.5
83	420.0	18.5	0.5
84	422.0	18.0	0.0
85	423.0	18.0	0.0
86	430.0	17.5	-0.5
87	434.0	17.5	-0.5
88	437.0	17.0	-1.0
89	441.0	16.5	-1.5
90	448.0	16.0	-2.0
91	451.0	15.5	-2.5
92	456.0	15.0	-3.0
93	459.0	15.0	-3.0
94	463.0	14.5	-3.5
95	464.0	15.0	-3.0
96	469.0	15.0	-3.0
97	476.0	16.0	-2.0
98	478.0	16.5	-1.5
99	480.0	17.0	-1.0
100	482.0	16.5	-1.5
101	488.0	17.5	-0.5
102	492.0	18.0	0.0
103	496.0	18.5	0.5
104	498.0	19.0	1.0
105	500.0	19.0	1.0
106	511.0	19.0	1.0
107	521.0	19.0	1.0

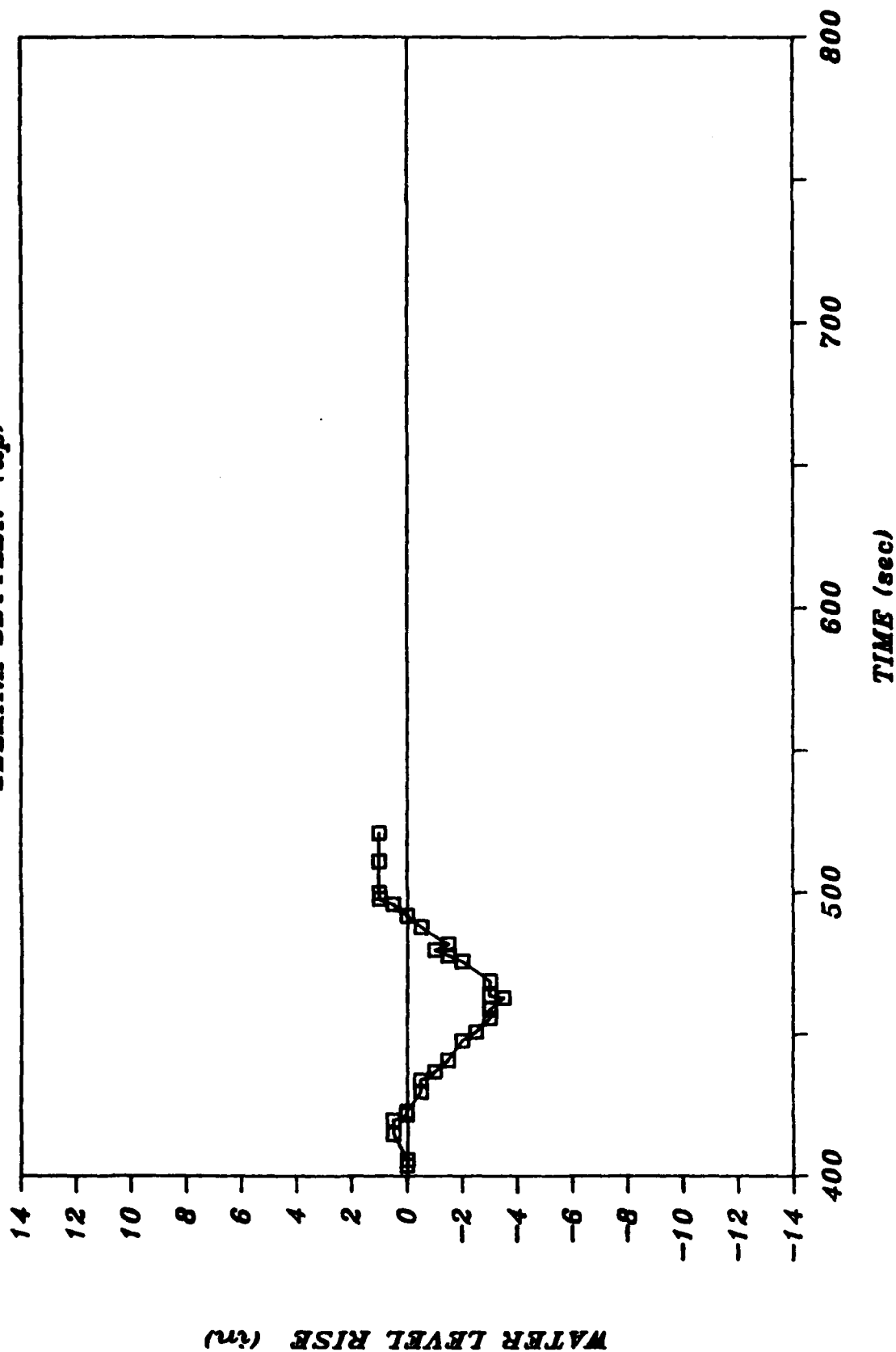
EAST CELL DOCK 11/12/84

SELKIRK SETTLER (wp)



EAST CELL DOCK 11/12/84

SELKIRK SETTLER (wp)



DRAWDOWN DATA

NAME OF SECTION EAST CELL DOCK

DATE OF OBSERVATION 11/12/84

VESSEL NAME BLACK BAY/MURRAY BAY

DIRECTION UPBOUND/UPBOUND

VESSEL LENGTH in feet = 730/730

VESSEL BEAM in feet = 75/75

VESSEL DRAFT in feet = 25/24

VESSEL SPEED in feet/sec. = 14.3/14.8

BOW ON TIME in sec = 45/316

STERN ON TIME in sec = 96/365

DISTANCE TO STAFF GAUGE from green side in feet = 2975(R-BE)

BACKGROUND READING in inches = 11

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	212.0	13.0	2.0
2	221.0	12.5	1.5
3	237.0	13.0	2.0
4	246.0	12.0	1.0
5	248.0	12.5	1.5
6	251.0	13.0	2.0
7	255.0	12.0	1.0
8	279.0	9.0	-2.0
9	289.0	9.0	-2.0
10	305.0	10.0	-1.0
11	309.0	11.0	0.0
12	311.0	12.0	1.0
13	316.0	13.0	2.0
14	319.0	12.5	1.5
15	334.0	15.0	4.0
16	336.0	15.0	4.0
17	339.0	13.5	2.5
18	351.0	13.0	2.0
19	353.0	13.0	2.0
20	357.0	12.0	1.0

#####

DRAWDOWN DATA (continued)

NAME OF SECTION EAST CELL DOCK

#####

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	360.0	12.5	1.5
22	364.0	11.0	0.0
23	367.0	10.5	-0.5
24	372.0	9.5	-1.5
25	375.0	9.5	-1.5
26	378.0	9.0	-2.0
27	383.0	9.0	-2.0
28	386.0	8.5	-2.5
29	392.0	8.5	-2.5
30	395.0	9.0	-2.0
31	397.0	8.5	-2.5
32	402.0	8.0	-3.0
33	405.0	8.0	-3.0
34	407.0	6.0	-5.0
35	411.0	7.0	-4.0
36	479.0	10.0	-1.0
37	482.0	10.5	-0.5
38	485.0	11.0	0.0
39	488.0	11.5	0.5
40	489.0	11.0	0.0
41	494.0	12.0	1.0
42	500.0	12.0	1.0
43	505.0	11.0	0.0
44	541.0	7.0	-4.0
45	544.0	6.5	-4.5
46	561.0	6.5	-4.5
47	564.0	6.5	-4.5
48	566.0	8.0	-3.0
49	569.0	9.0	-2.0
50	573.0	9.5	-1.5
51	577.0	10.0	-1.0
52	579.0	9.5	-1.5
53	581.0	10.0	-1.0
54	583.0	10.5	-0.5
55	589.0	10.5	-0.5
56	592.0	11.0	0.0
57	595.0	11.0	0.0
58	596.0	11.5	0.5
59	598.0	12.0	1.0
60	609.0	12.0	1.0
61	610.0	11.0	0.0
62	615.0	10.0	-1.0
63	623.0	10.0	-1.0
64	627.0	9.0	-2.0

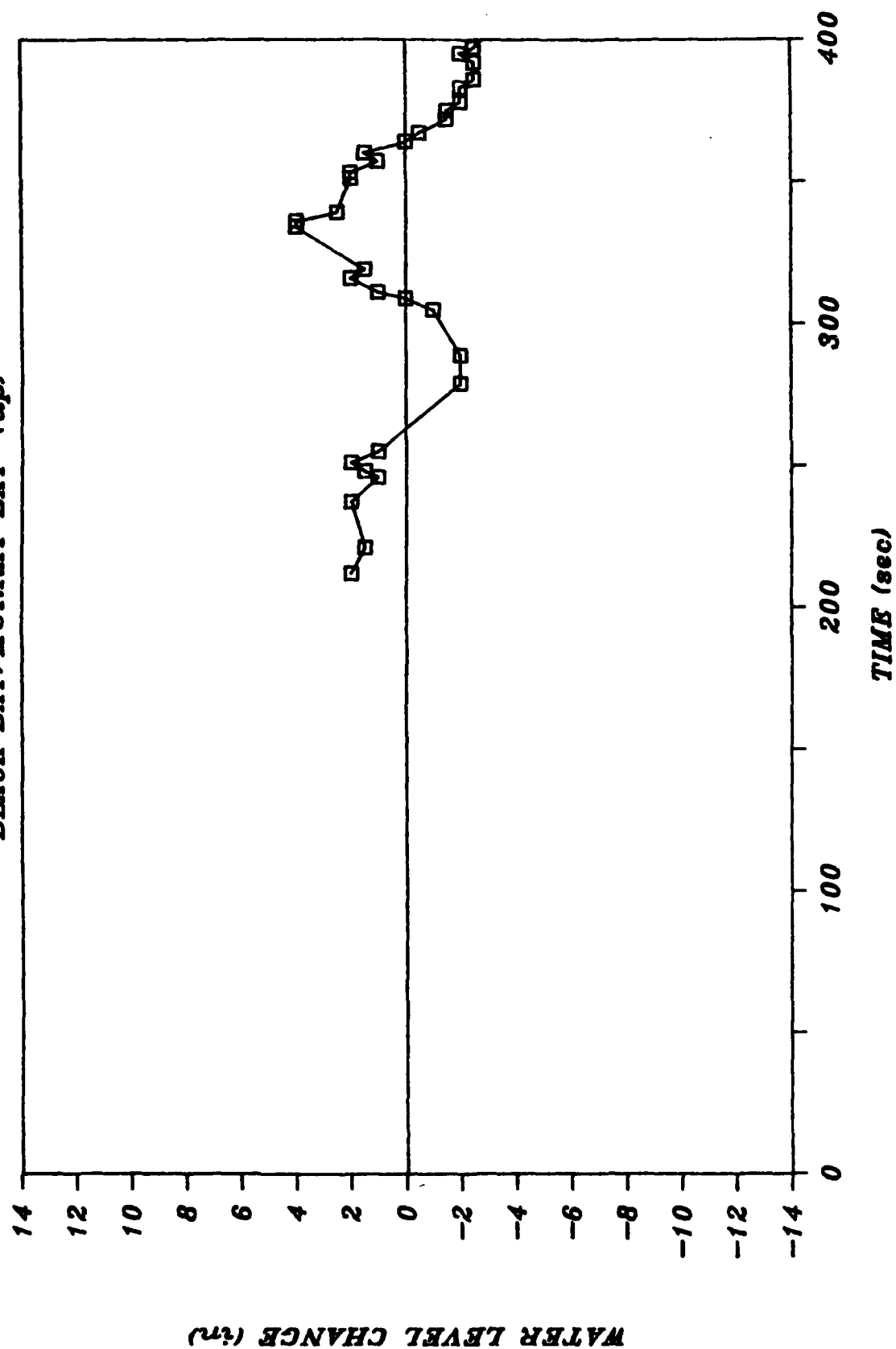
DRAWDOWN DATA (continued)

NAME OF SECTION EAST CELL DOCK

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
65	640.0	9.0	-2.0
66	644.0	10.0	-1.0
67	650.0	10.0	-1.0
68	652.0	10.5	-0.5
69	654.0	10.5	-0.5
70	658.0	11.0	0.0
71	661.0	12.0	1.0
72	663.0	13.0	2.0
73	665.0	12.5	1.5
74	669.0	13.0	2.0
75	677.0	13.0	2.0
76	680.0	12.5	1.5
77	684.0	12.5	1.5
78	686.0	12.0	1.0
79	690.0	12.0	1.0
80	693.0	11.5	0.5
81	696.0	11.5	0.5
82	698.0	11.0	0.0
83	728.0	11.0	0.0

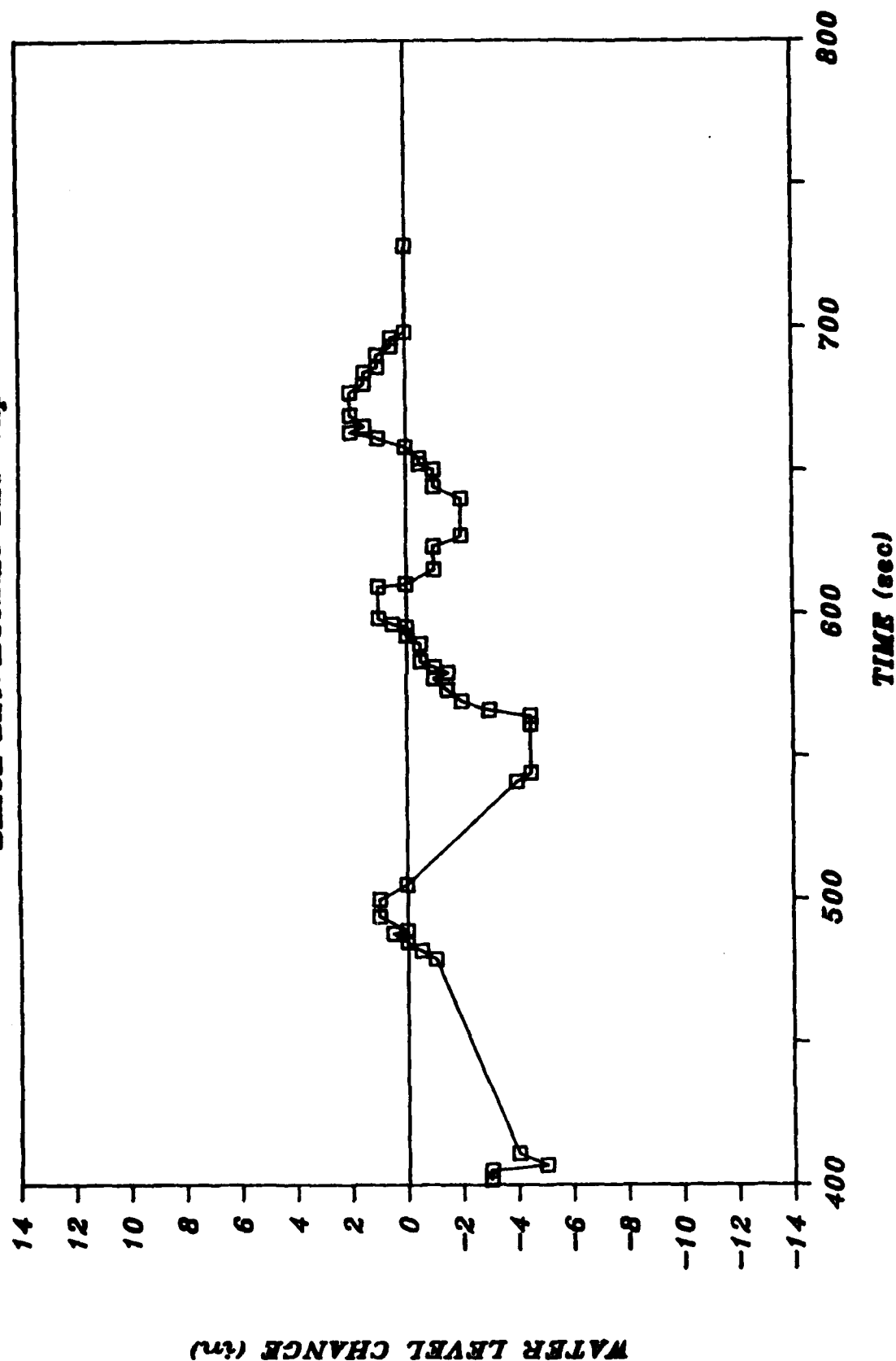
EAST CELL DOCK 11/12/84

BLACK BAY/MURRAY BAY (wp)



EAST CELL DOCK 11/12/84

BLACK BAY/MURRAY BAY (usp)



oo

DRAWDOWN DATA

NAME OF SECTION EAST CELL DOCK
oo

DATE OF OBSERVATION 11/12/84

VESSEL NAME BLACK BAY/MURRAY BAY

DIRECTION UPBOUND/UPBOUND

VESSEL LENGTH in feet = 730/730

VESSEL BEAM in feet = 75/75

VESSEL DRAFT in feet = 25/24

VESSEL SPEED in feet/sec. = 14.3/14.8

BOW ON TIME in sec = 22/294

STERN ON TIME in sec = 73/343

DISTANCE TO STAFF GAUGE from green side in feet = 3005(R-AF)

BACKGROUND READING in inches = 18

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	18.0	0.0
2	24.0	18.0	0.0
3	26.0	17.5	-0.5
4	43.0	17.5	-0.5
5	44.0	17.0	-1.0
6	65.0	17.0	-1.0
7	76.0	16.5	-1.5
8	86.0	16.5	-1.5
9	93.0	16.0	-2.0
10	98.0	16.0	-2.0
11	111.0	16.5	-1.5
12	114.0	16.5	-1.5
13	126.0	17.0	-1.0
14	143.0	17.5	-0.5
15	146.0	17.5	-0.5
16	149.0	18.0	0.0
17	152.0	18.0	0.0
18	156.0	18.5	0.5
19	159.0	19.0	1.0
20	161.0	19.0	1.0

DRAWDOWN DATA (continued)

NAME OF SECTION EAST CELL DOCK

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	168.0	19.5	1.5
22	176.0	19.5	1.5
23	177.0	20.0	2.0
24	178.0	20.0	2.0
25	186.0	19.5	1.5
26	193.0	19.5	1.5
27	202.0	19.0	1.0
28	207.0	18.5	0.5
29	209.0	18.0	0.0
30	218.0	17.5	-0.5
31	221.0	17.5	-0.5
32	224.0	17.0	-1.0
33	229.0	16.5	-1.5
34	232.0	16.0	-2.0
35	240.0	15.5	-2.5
36	249.0	15.5	-2.5
37	254.0	16.0	-2.0
38	257.0	17.0	-1.0
39	260.0	17.5	-0.5
40	262.0	18.0	0.0
41	270.0	18.0	0.0
42	271.0	18.5	0.5
43	272.0	19.0	1.0
44	275.0	19.5	1.5
45	278.0	20.0	2.0
46	281.0	20.5	2.5
47	286.0	21.0	3.0
48	300.0	21.0	3.0
49	302.0	21.5	3.5
50	305.0	21.0	3.0
51	309.0	21.0	3.0
52	313.0	19.5	1.5
53	315.0	18.0	0.0
54	318.0	18.5	0.5
55	322.0	18.0	0.0
56	327.0	17.5	-0.5
57	329.0	17.0	-1.0
58	334.0	16.0	-2.0
59	337.0	15.5	-2.5
60	342.0	15.0	-3.0
61	362.0	15.0	-3.0
62	368.0	15.5	-2.5
63	371.0	16.0	-2.0
64	374.0	16.0	-2.0

DRAWDOWN DATA (continued)

NAME OF SECTION	EAST CELL DOCK
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

DATA POINT	TIME(sec)	READING(in)	CHANGE FROM BG(in)
65	378.0	16.5	-1.5
66	397.0	16.5	-1.5
67	407.0	15.0	-3.0
68	411.0	15.0	-3.0
69	414.0	14.0	-4.0
70	418.0	14.0	-4.0
71	423.0	13.5	-4.5
72	429.0	16.0	-2.0
73	430.0	15.5	-2.5
74	432.0	16.0	-2.0
75	433.0	17.0	-1.0
76	435.0	17.0	-1.0
77	438.0	17.5	-0.5
78	440.0	18.0	0.0
79	441.0	18.5	0.5
80	442.0	19.0	1.0
81	444.0	18.5	0.5
82	445.0	19.0	1.0
83	446.0	19.0	1.0
84	449.0	20.0	2.0
85	451.0	19.5	1.5
86	453.0	19.5	1.5
87	458.0	19.5	1.5
88	464.0	19.5	1.5
89	466.0	19.0	1.0
90	473.0	18.0	0.0
91	475.0	17.0	-1.0
92	478.0	16.0	-2.0
93	482.0	15.0	-3.0
94	484.0	15.0	-3.0
95	490.0	14.0	-4.0
96	495.0	13.0	-5.0
97	498.0	12.0	-6.0
98	500.0	12.0	-6.0
99	511.0	11.0	-7.0
100	514.0	12.0	-6.0
101	525.0	14.0	-4.0
102	526.0	15.0	-3.0
103	529.0	16.0	-2.0
104	532.0	17.0	-1.0
105	536.0	17.5	-0.5
106	542.0	18.0	0.0
107	544.0	18.0	0.0
108	550.0	21.0	3.0

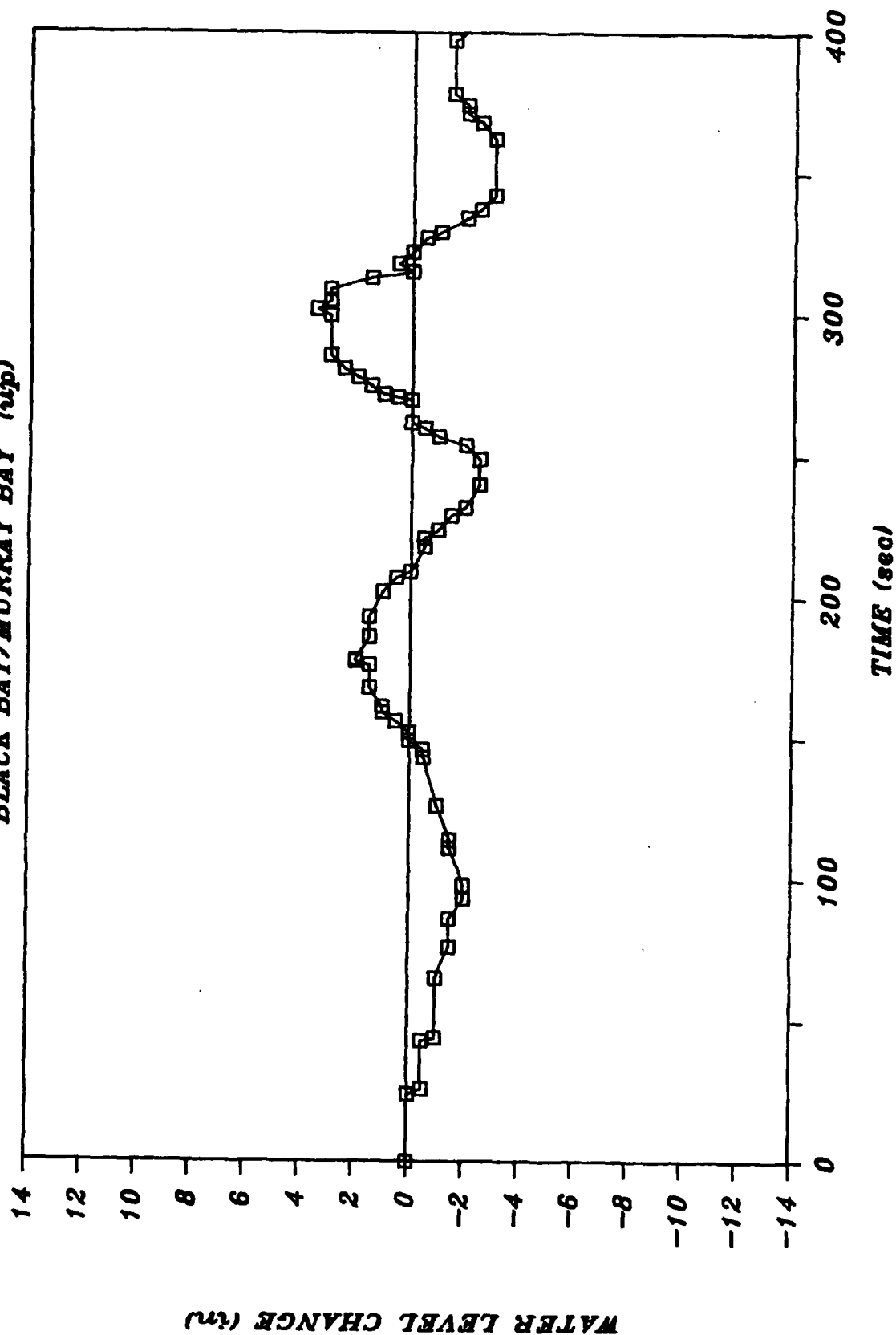
DRAWDOWN DATA (continued)

NAME OF SECTION EAST CELL DOCK

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
109	558.0	20.0	2.0
110	560.0	20.0	2.0
111	561.0	19.5	1.5
112	563.0	19.5	1.5
113	567.0	18.5	0.5
114	569.0	18.0	0.0
115	570.0	17.5	-0.5
116	575.0	17.0	-1.0
117	580.0	16.0	-2.0
118	589.0	16.0	-2.0
119	591.0	15.5	-2.5
120	594.0	16.0	-2.0
121	596.0	15.5	-2.5
122	600.0	15.5	-2.5
123	602.0	16.0	-2.0
124	609.0	16.5	-1.5
125	615.0	17.0	-1.0
126	619.0	17.5	-0.5
127	622.0	17.5	-0.5
128	624.0	18.0	0.0
129	635.0	18.0	0.0
130	643.0	19.0	1.0
131	645.0	18.5	0.5
132	648.0	19.0	1.0
133	658.0	19.0	1.0
134	660.0	18.5	0.5
135	664.0	18.5	0.5

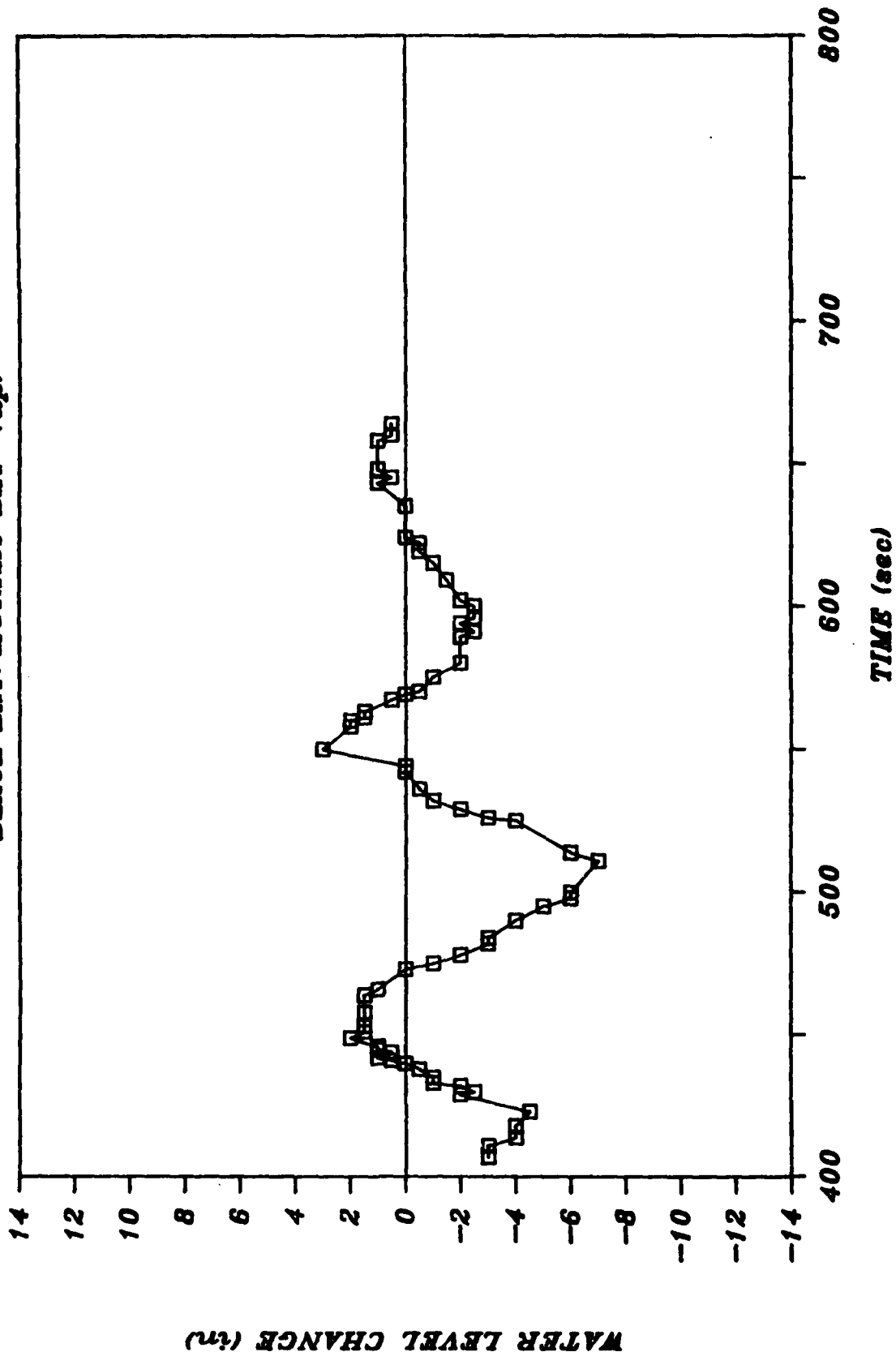
EAST CELL DOCK 11/12/84

BLACK BAY/MURRAY BAY (wp)



EAST CELL DOCK 11/12/84

BLACK BAY/MURRAY BAY (wp)



WEST CELL DOCK

DRAWDOWN DATA

NAME OF SECTION **WEST CELL DOCK**

DATE OF OBSERVATION **5/24/85**

VESSEL NAME **RICHELIEU**

DIRECTION **UPBOUND**

VESSEL LENGTH in feet = **730**

VESSEL BEAM in feet = **75**

VESSEL DRAFT in feet = **15**

VESSEL SPEED in feet/sec. = **12.37**

BOW ON TIME in sec = **55**

STERN ON TIME in sec = **114**

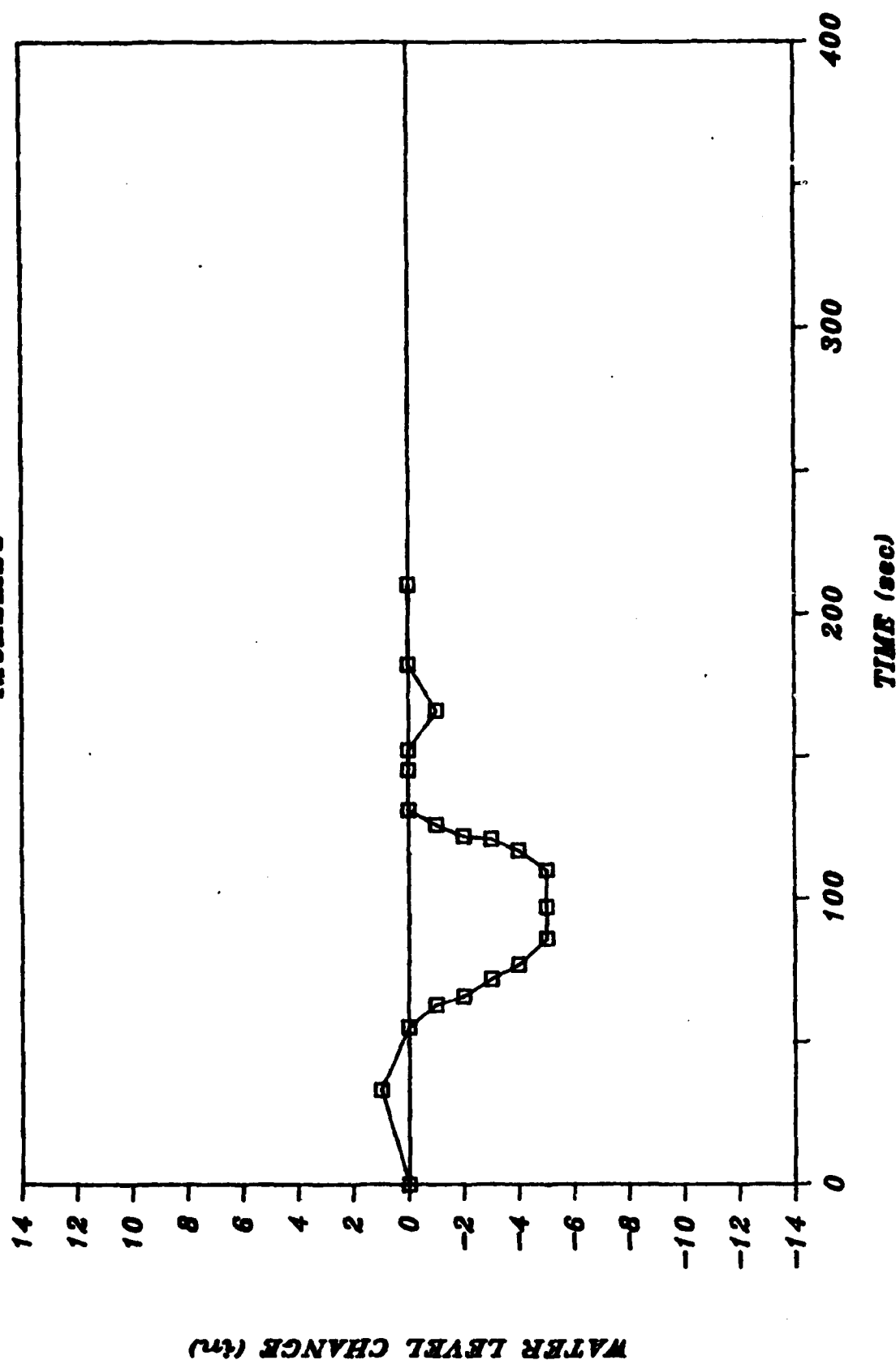
DISTANCE TO STAFF GAUGE from green side in feet = **40**

BACKGROUND READING in inches = **22**

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	22.0	0.0
2	33.0	23.0	1.0
3	55.0	22.0	0.0
4	63.0	21.0	-1.0
5	66.0	20.0	-2.0
6	72.0	19.0	-3.0
7	77.0	18.0	-4.0
8	86.0	17.0	-5.0
9	97.0	17.0	-5.0
10	110.0	17.0	-5.0
11	117.0	18.0	-4.0
12	121.0	19.0	-3.0
13	122.0	20.0	-2.0
14	126.0	21.0	-1.0
15	131.0	22.0	0.0
16	145.0	22.0	0.0
17	152.0	22.0	0.0
18	166.0	21.0	-1.0
19	182.0	22.0	0.0
20	210.0	22.0	0.0

WEST CELL DOCK (green)

RICHBLIBU



DRAWDOWN DATA

NAME OF SECTION WEST CELL DOCK

DATE OF OBSERVATION 5/24/85

VESSEL NAME RICHELIEU

DIRECTION UBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 15

VESSEL SPEED in feet/sec. = 12.37

BOW ON TIME in sec = 55

STERN ON TIME in sec = 114

DISTANCE TO STAFF GAUGE from green side in feet = 1395

BACKGROUND READING in inches = 26

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	26.0	0.0
2	30.0	26.0	0.0
3	37.0	25.0	-1.0
4	46.0	25.0	-1.0
5	56.0	24.0	-2.0
6	70.0	23.0	-3.0
7	76.0	23.0	-3.0
8	86.0	22.0	-4.0
9	88.0	21.0	-5.0
10	97.0	21.0	-5.0
11	106.0	22.0	-4.0
12	108.0	23.0	-3.0
13	119.0	23.0	-3.0
14	135.0	24.0	-2.0
15	140.0	25.0	-1.0
16	151.0	26.0	0.0
17	159.0	25.0	-1.0
18	166.0	25.0	-1.0
19	182.0	25.0	-1.0
20	196.0	25.0	-1.0

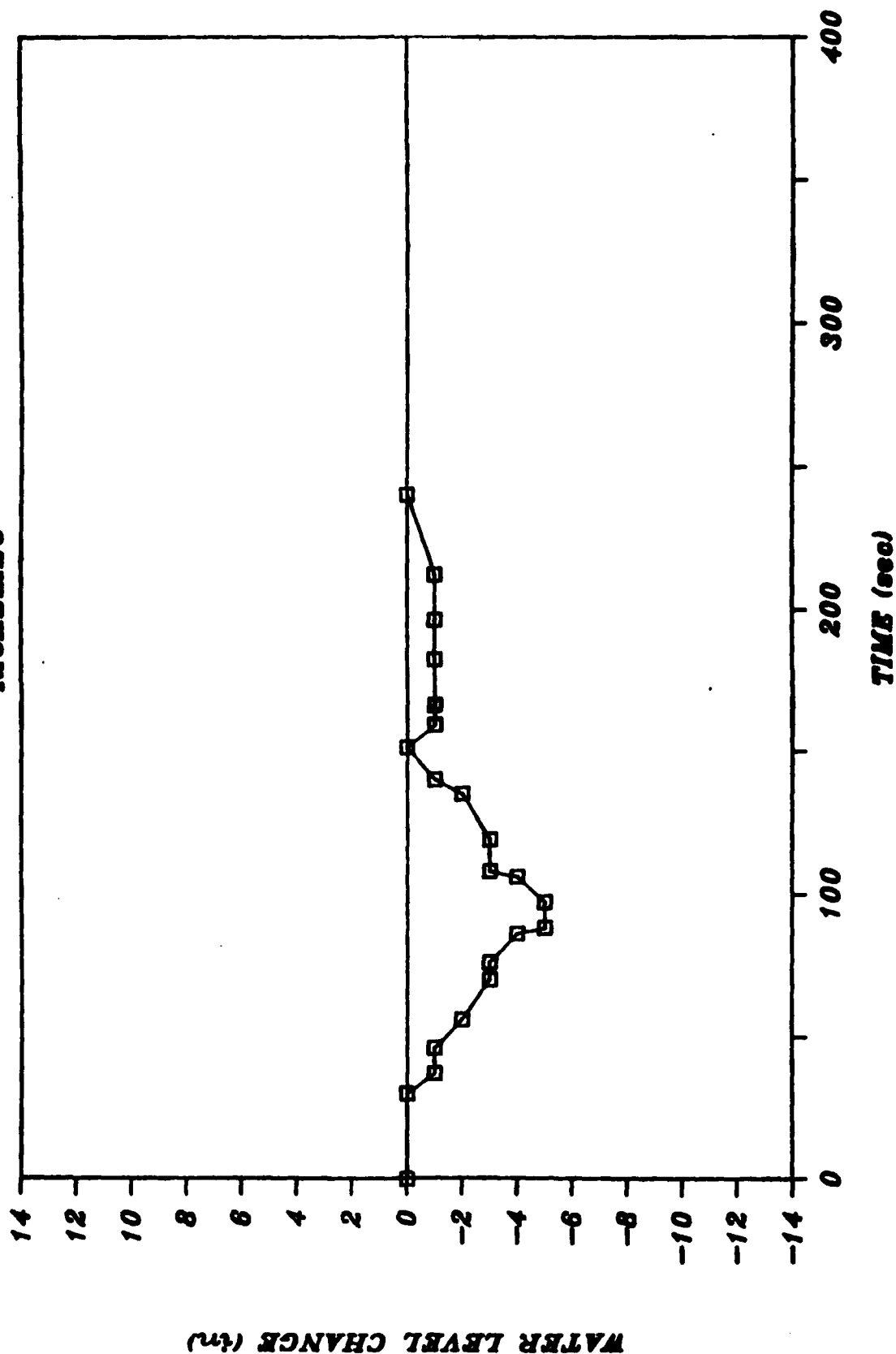
DRAWDOWN DATA (continued)

NAME OF SECTION WEST CELL DOCK

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	212.0	25.0	-1.0
22	240.0	26.0	0.0

WEST CELL DOCK (red)

RICHBLIU



DRAWDOWN DATA

NAME OF SECTION	WEST CELL DOCK
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

VESSEL NAME **CONEAUDOC**

VESSEL LENGTH in foot = 730

VESSEL DRAFT in feet = 14

BOW ON TIME in sec = 104

DISTANCE TO STAFF GAUGE from green side in feet = 40

BACKGROUND READING in inches = 22

1	0.0	22.0	0.0
2	84.0	22.0	0.0
3	104.0	21.0	-1.0
4	114.0	20.0	-2.0
5	119.0	19.0	-3.0
6	124.0	18.0	-4.0
7	130.0	17.0	-5.0
8	133.0	16.0	-6.0
9	139.0	15.0	-7.0
10	147.0	15.0	-7.0
11	158.0	15.0	-7.0
12	159.0	17.0	-5.0
13	163.0	18.0	-4.0
14	167.0	19.0	-3.0
15	172.0	20.0	-2.0
16	174.0	21.0	-1.0
17	177.0	22.0	0.0
18	180.0	23.0	1.0
19	189.0	23.0	1.0
20	195.0	22.0	0.0

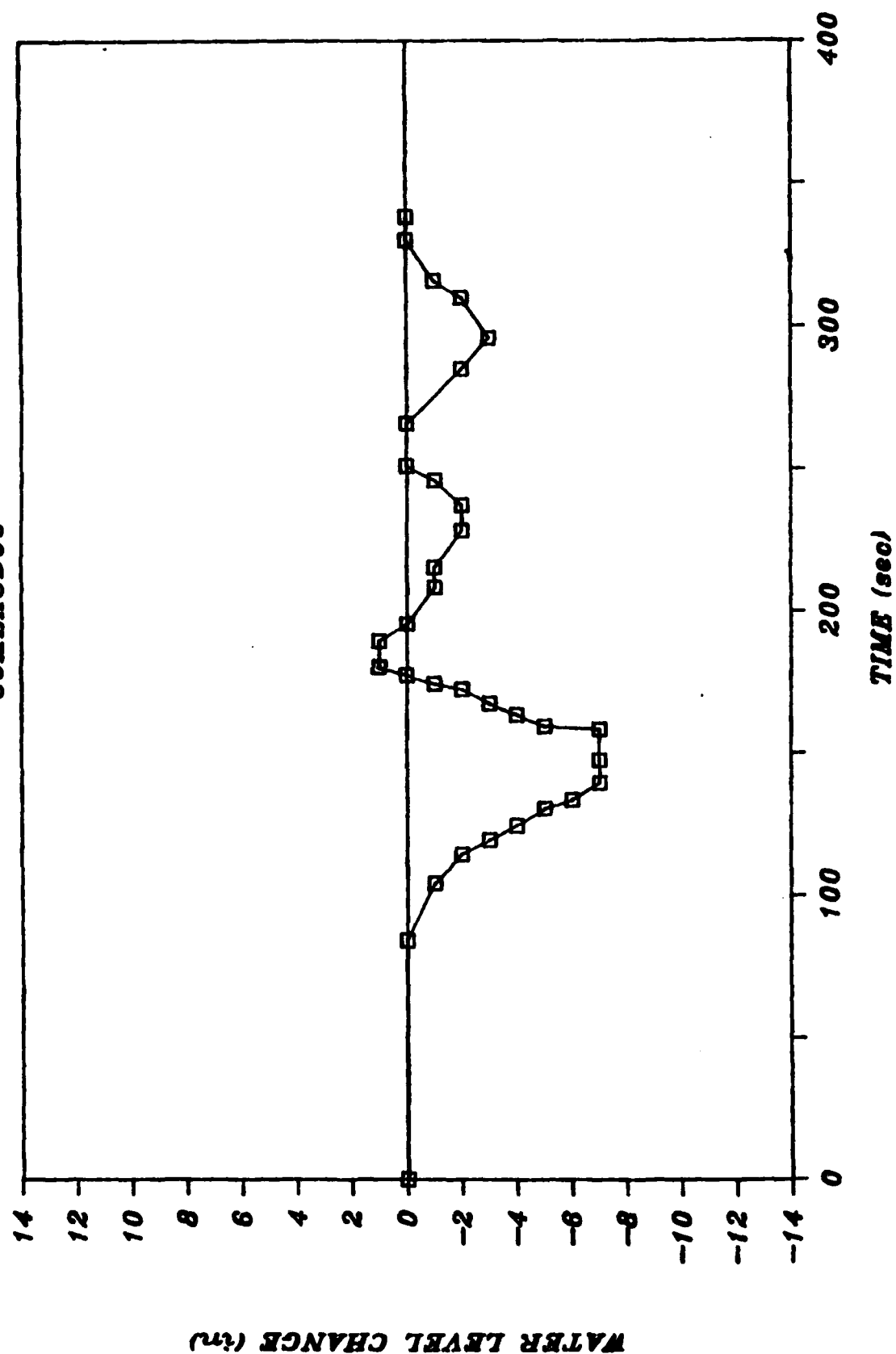
DRAWDOWN DATA (continued)

NAME OF SECTION WEST CELL DOCK

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	208.0	21.0	-1.0
22	215.0	21.0	-1.0
23	228.0	20.0	-2.0
24	237.0	20.0	-2.0
25	246.0	21.0	-1.0
26	251.0	22.0	0.0
27	266.0	22.0	0.0
28	285.0	20.0	-2.0
29	296.0	19.0	-3.0
30	310.0	20.0	-2.0
31	316.0	21.0	-1.0
32	330.0	22.0	0.0
33	338.0	22.0	0.0

WEST CELL DOCK (green)

COMBAUDOC



 DRAWDOWN DATA

NAME OF SECTION WEST CELL DOCK

DATE OF OBSERVATION 5/24/85

VESSEL NAME CONEAUDOC

DIRECTION UPBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 14

VESSEL SPEED in feet/sec. = 14.31

BOW ON TIME in sec = 104

STERN ON TIME in sec = 155

DISTANCE TO STAFF GAUGE from green side in feet = 1395

BACKGROUND READING in inches = 26

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	26.0	0.0
2	90.0	26.0	0.0
3	95.0	25.0	-1.0
4	104.0	24.0	-2.0
5	108.0	23.0	-3.0
6	114.0	22.0	-4.0
7	126.0	21.0	-5.0
8	133.0	21.0	-5.0
9	138.0	20.0	-6.0
10	144.0	20.0	-6.0
11	150.0	21.0	-5.0
12	153.0	22.0	-4.0
13	156.0	23.0	-3.0
14	167.0	24.0	-2.0
15	173.0	25.0	-1.0
16	211.0	25.0	-1.0
17	213.0	26.0	0.0
18	226.0	26.0	0.0
19	236.0	25.0	-1.0
20	265.0	25.0	-1.0

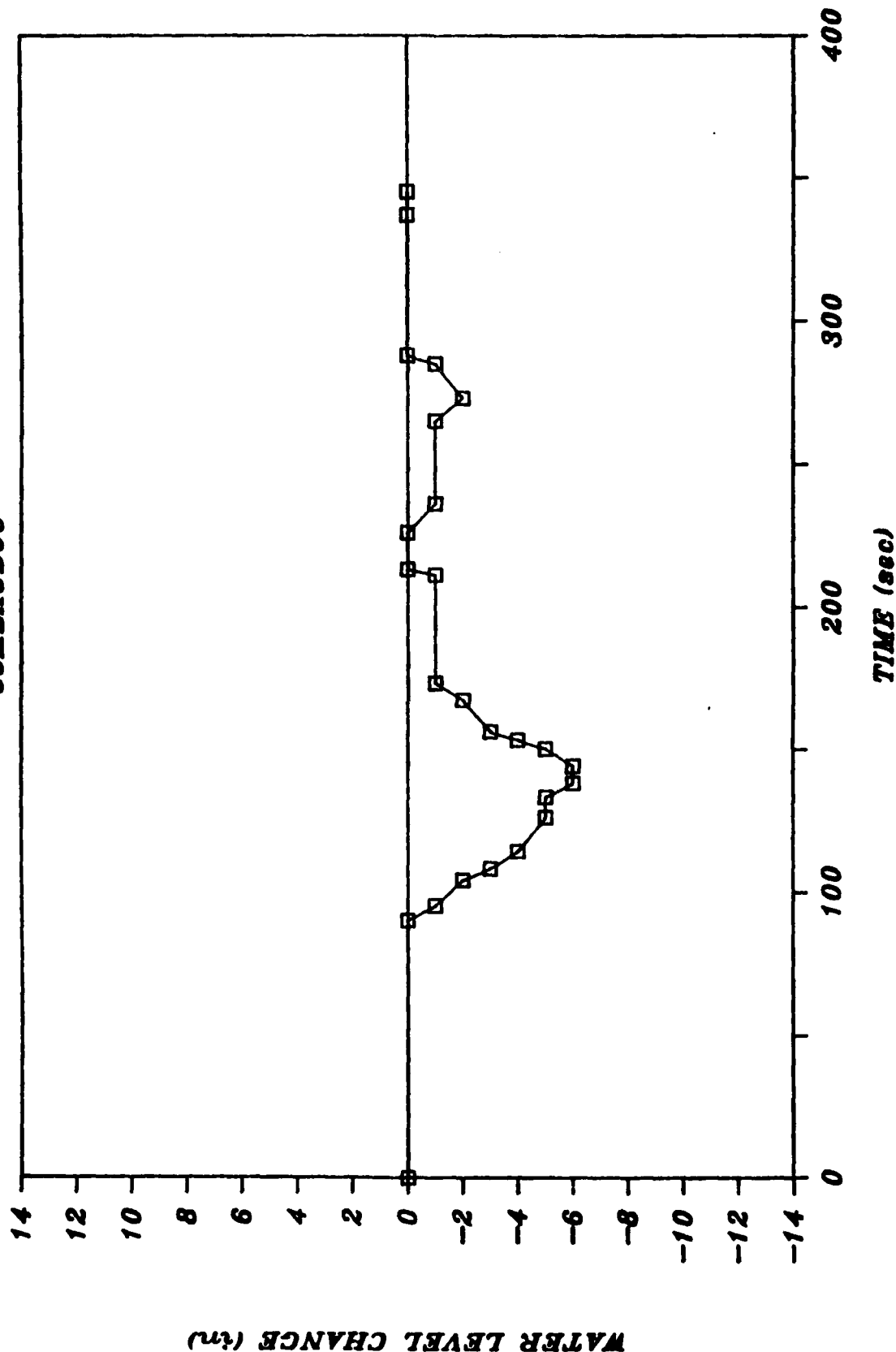
DRAWDOWN DATA (continued)

NAME OF SECTION WEST CELL DOCK

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	273.0	24.0	-2.0
22	285.0	25.0	-1.0
23	288.0	26.0	0.0
24	337.0	26.0	0.0
25	345.0	26.0	0.0

WEST CELL DOCK (red)

COMBAUDOC



BF11

~~~~~  
 DRAWDOWN DATA

NAME OF SECTION      WEST CELL DOCK  
 ~~~~~

DATE OF OBSERVATION 5/24/85

VESSEL NAME PAUL H. CARNAHAN

DIRECTION UPBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 16.5

VESSEL SPEED in feet/sec. = 13.77

BOW ON TIME in sec = 74

STERN ON TIME in sec = 127

DISTANCE TO STAFF GAUGE from green side in feet = 40

BACKGROUND READING in inches = 23

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	23.0	0.0
2	31.0	23.0	0.0
3	47.0	22.0	-1.0
4	57.0	22.0	-1.0
5	77.0	22.0	-1.0
6	89.0	21.0	-2.0
7	92.0	20.0	-3.0
8	96.0	19.0	-4.0
9	98.0	18.0	-5.0
10	101.0	17.0	-6.0
11	103.0	16.0	-7.0
12	108.0	15.0	-8.0
13	117.0	14.0	-9.0
14	123.0	14.0	-9.0
15	127.0	16.0	-7.0
16	135.0	18.0	-5.0
17	139.0	19.0	-4.0
18	146.0	21.0	-2.0
19	147.0	22.0	-1.0
20	149.0	23.0	0.0

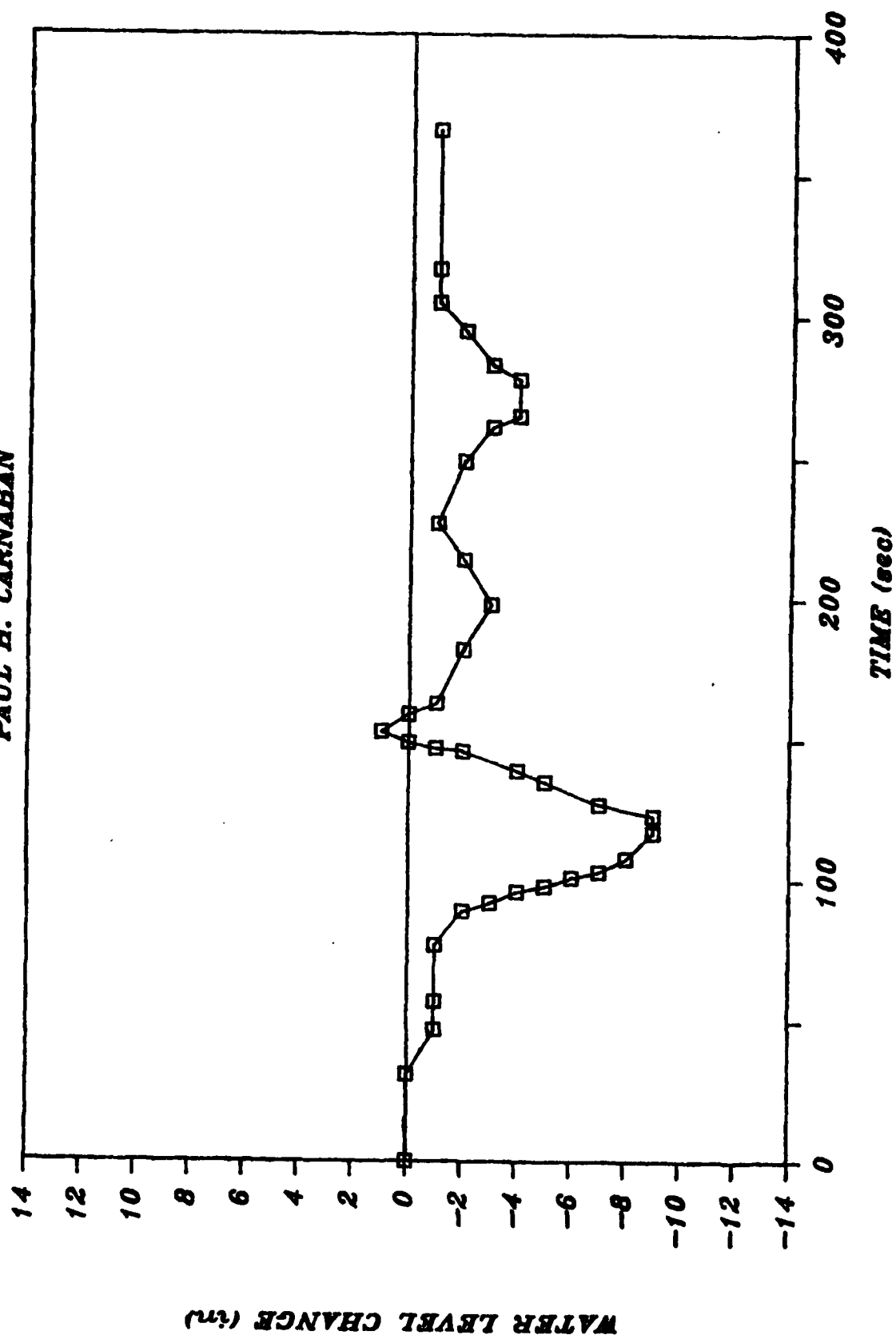
DRAWDOWN DATA (continued)

NAME OF SECTION WEST CELL DOCK

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	153.0	24.0	1.0
22	159.0	23.0	0.0
23	163.0	22.0	-1.0
24	182.0	21.0	-2.0
25	198.0	20.0	-3.0
26	214.0	21.0	-2.0
27	227.0	22.0	-1.0
28	249.0	21.0	-2.0
29	261.0	20.0	-3.0
30	265.0	19.0	-4.0
31	278.0	19.0	-4.0
32	283.0	20.0	-3.0
33	295.0	21.0	-2.0
34	305.0	22.0	-1.0
35	317.0	22.0	-1.0
36	366.0	22.0	-1.0

WEST CELL DOCK (green)

PAUL H. CARNAHAN



DRAWDOWN DATA

NAME OF SECTION	WEST CELL DOCK
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

DATE OF OBSERVATION 5/24/85

VESSEL NAME **PAUL H. CARNAHAN**

DIRECTION	UPBOUND
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

VESSEL LENGTH in foot = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 16.5

VESSEL SPEED in feet/sec. = 13.77

BOW ON TIME in SEC = 74

STERN ON TIME 1p SEC = 127

DISTANCE TO STAFF GAUGE from green side in feet = 1395

BACKGROUND READING in inches = 26

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	26.0	0.0
2	31.0	26.0	0.0
3	57.0	26.0	0.0
4	68.0	25.0	-1.0
5	74.0	24.0	-2.0
6	82.0	23.0	-3.0
7	88.0	22.0	-4.0
8	98.0	22.0	-4.0
9	102.0	21.0	-5.0
10	104.0	20.0	-6.0
11	121.0	20.0	-6.0
12	123.0	21.0	-5.0
13	124.0	22.0	-4.0
14	127.0	23.0	-3.0
15	133.0	23.0	-3.0
16	143.0	24.0	-2.0
17	149.0	25.0	-1.0
18	165.0	26.0	0.0
19	211.0	26.0	0.0
20	225.0	25.0	-1.0

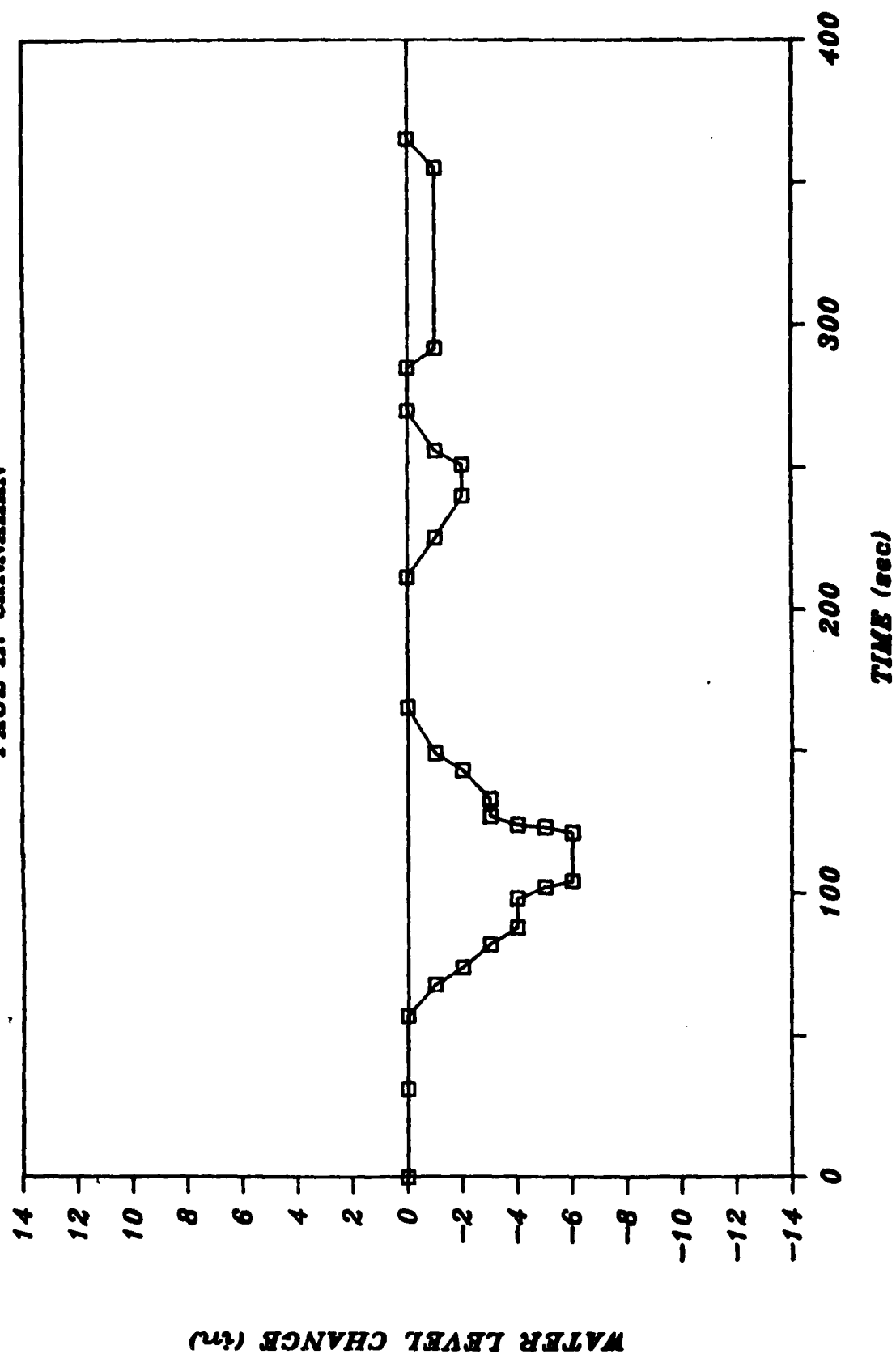
DRAWDOWN DATA (continued)

NAME OF SECTION WEST CELL DOCK

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	240.0	24.0	-2.0
22	251.0	24.0	-2.0
23	256.0	25.0	-1.0
24	270.0	26.0	0.0
25	285.0	26.0	0.0
26	292.0	25.0	-1.0
27	355.0	25.0	-1.0
28	365.0	26.0	0.0

WEST CELL DOCK (red)

PAUL H. CARNAHAN



 DRAWDOWN DATA

NAME OF SECTION WEST CELL DOCK

DATE OF OBSERVATION 5/24/85

VESSEL NAME ERNEST R. BREECH

DIRECTION UPBOUND

VESSEL LENGTH in feet = 642

VESSEL BEAM in feet = 67

VESSEL DRAFT in feet = 11?

VESSEL SPEED in feet/sec. = 12.35

BOW ON TIME in sec = 114

STERN ON TIME in sec = 166

DISTANCE TO STAFF GAUGE from green side in feet = 40

BACKGROUND READING in inches = 22

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	22.0	0.0
2	24.0	22.0	0.0
3	46.0	22.0	0.0
4	57.0	23.0	1.0
5	67.0	23.0	1.0
6	87.0	22.0	0.0
7	101.0	21.0	-1.0
8	110.0	21.0	-1.0
9	118.0	20.0	-2.0
10	126.0	19.0	-3.0
11	140.0	18.0	-4.0
12	151.0	18.0	-4.0
13	157.0	19.0	-3.0
14	170.0	20.0	-2.0
15	175.0	21.0	-1.0
16	187.0	21.0	-1.0
17	197.0	21.0	-1.0
18	214.0	21.0	-1.0
19	230.0	22.0	0.0
20	241.0	22.0	0.0

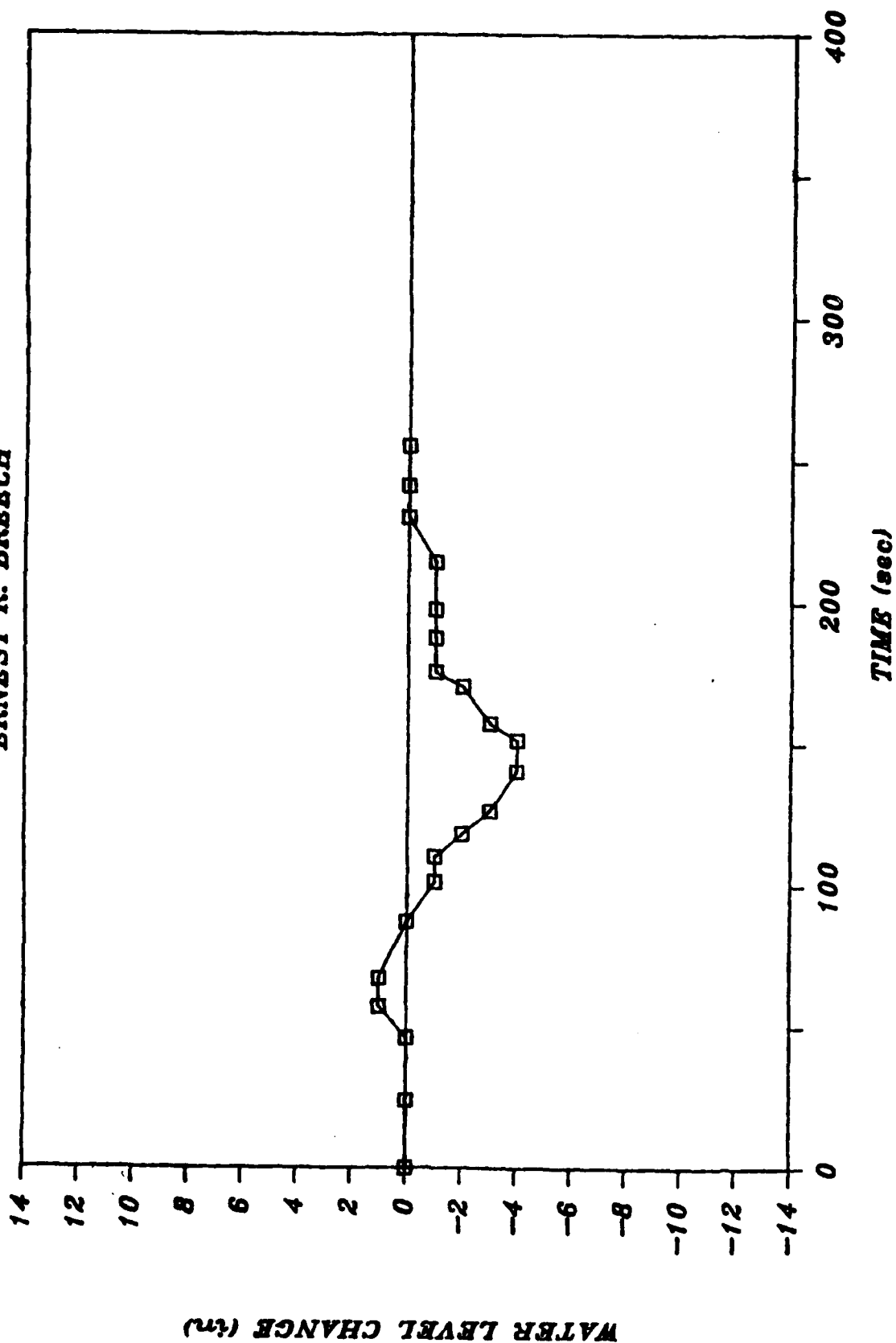
DRAWDOWN DATA (continued)

NAME OF SECTION WEST CELL DOCK

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	255.0	22.0	0.0

WEST CELL DOCK (green)

ERNEST R. BREECH



DRAWDOWN DATA

NAME OF SECTION WEST CELL DOCK

DATE OF OBSERVATION 5/24/85

VESSEL NAME ERNEST R. BREECH

DIRECTION UPBOUND

VESSEL LENGTH in feet = 642

VESSEL BEAM in feet = 67

VESSEL DRAFT in feet = 11?

VESSEL SPEED in feet/sec. = 12.35

BOW ON TIME in sec = 114

STERN ON TIME in sec = 166

DISTANCE TO STAFF GAUGE from green side in feet = 1395

BACKGROUND READING in inches = 26

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	26.0	0.0
2	12.0	26.0	0.0
3	102.0	26.0	0.0
4	113.0	25.0	-1.0
5	116.0	25.0	-1.0
6	122.0	24.0	-2.0
7	128.0	23.0	-3.0
8	135.0	23.0	-3.0
9	140.0	22.0	-4.0
10	148.0	22.0	-4.0
11	159.0	23.0	-3.0
12	165.0	23.0	-3.0
13	174.0	24.0	-2.0
14	180.0	24.0	-2.0
15	182.0	25.0	-1.0
16	188.0	25.0	-1.0
17	196.0	25.0	-1.0
18	206.0	26.0	0.0
19	215.0	25.0	-1.0
20	249.0	25.0	-1.0

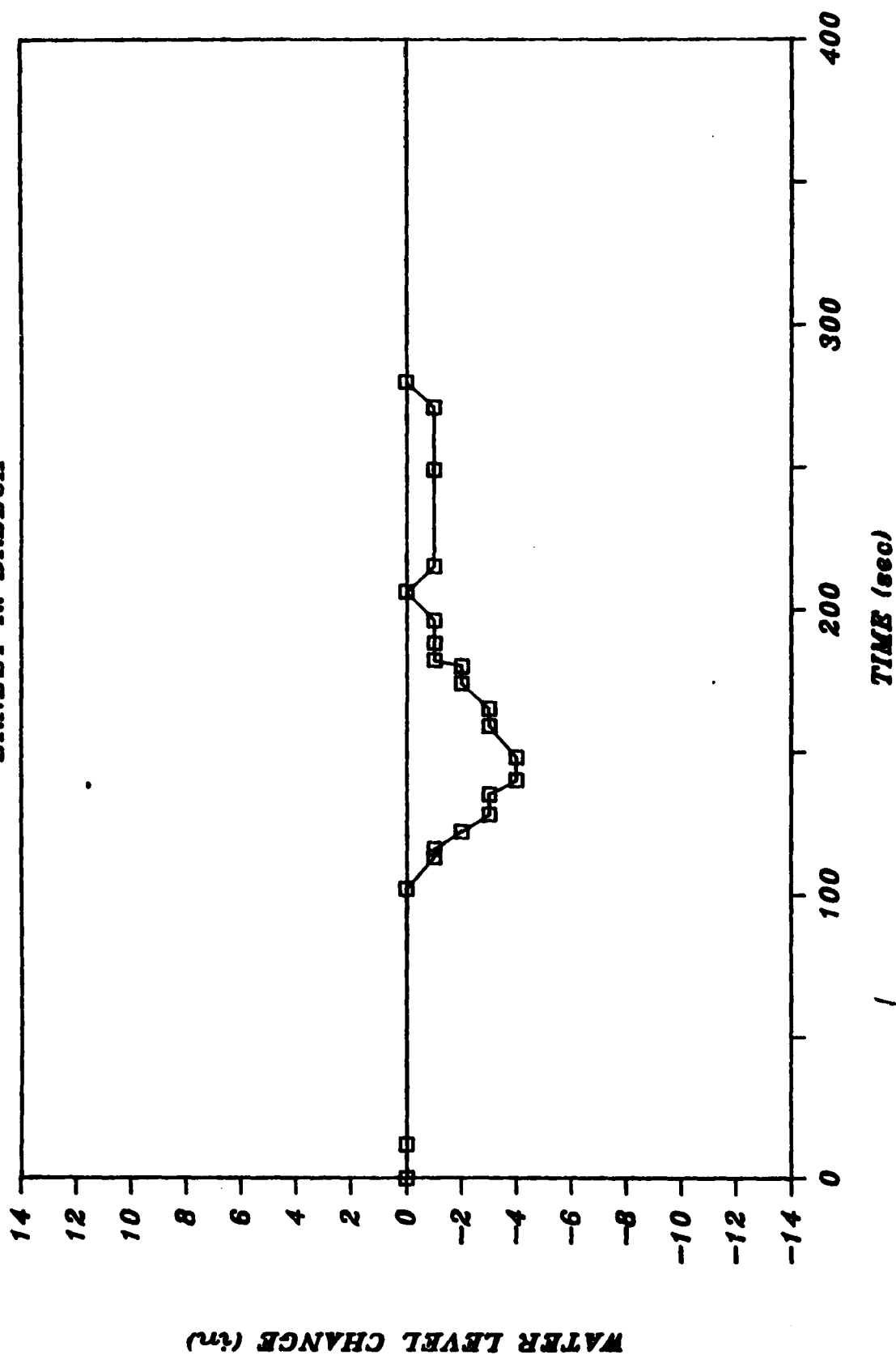
DRAWDOWN DATA (continued)

NAME OF SECTION WEST CELL DOCK

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	271.0	25.0	-1.0
22	280.0	26.0	0.0

WEST CELL DOCK (red)

ERNEST R. BREECH



NAME OF SECTION	WEST CELL DOCK
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

BACKGROUND READING in inches = 23

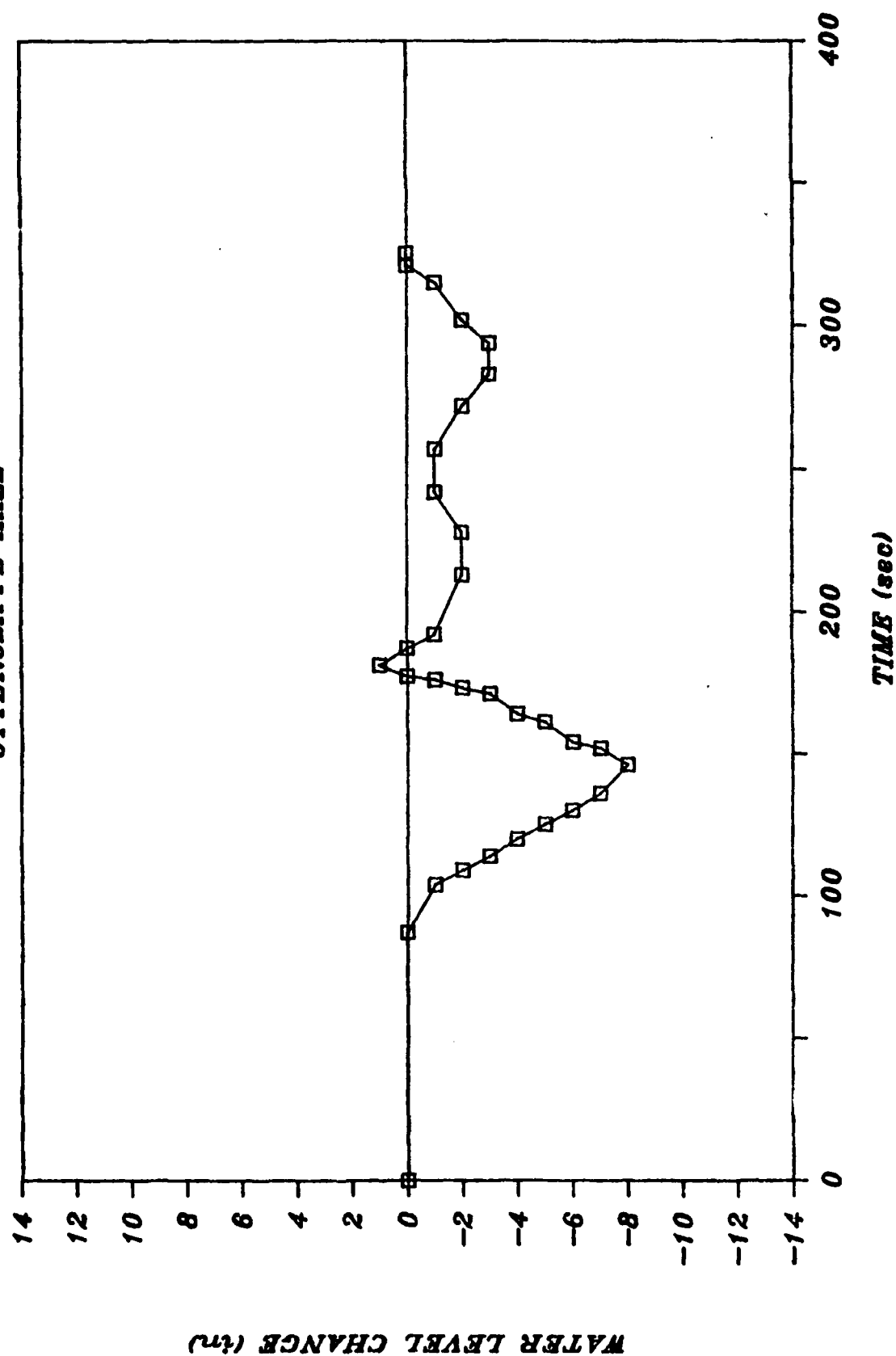
BF24

DRAWDOWN DATA (continued)

NAME OF SECTION WEST CELL DOCK

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	192.0	22.0	-1.0
22	213.0	21.0	-2.0
23	228.0	21.0	-2.0
24	242.0	22.0	-1.0
25	257.0	22.0	-1.0
26	272.0	21.0	-2.0
27	283.0	20.0	-3.0
28	294.0	20.0	-3.0
29	302.0	21.0	-2.0
30	315.0	22.0	-1.0
31	321.0	23.0	0.0
32	325.0	23.0	0.0

WEST CELL DOCK (green)
OTTERCLIFFE HALL



DRAWDOWN DATA

NAME OF SECTION	WEST CELL DOCK
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

VESSEL NAME **OTTERCLIFFE HALL**

VESSEL LENGTH in feet = 730

VESSEL DRAFT in feet = 15.5

BOW ON TIME in sec = 103

DISTANCE TO STAFF GAUGE from green side in feet = 1395

BACKGROUND READING in inches = 26

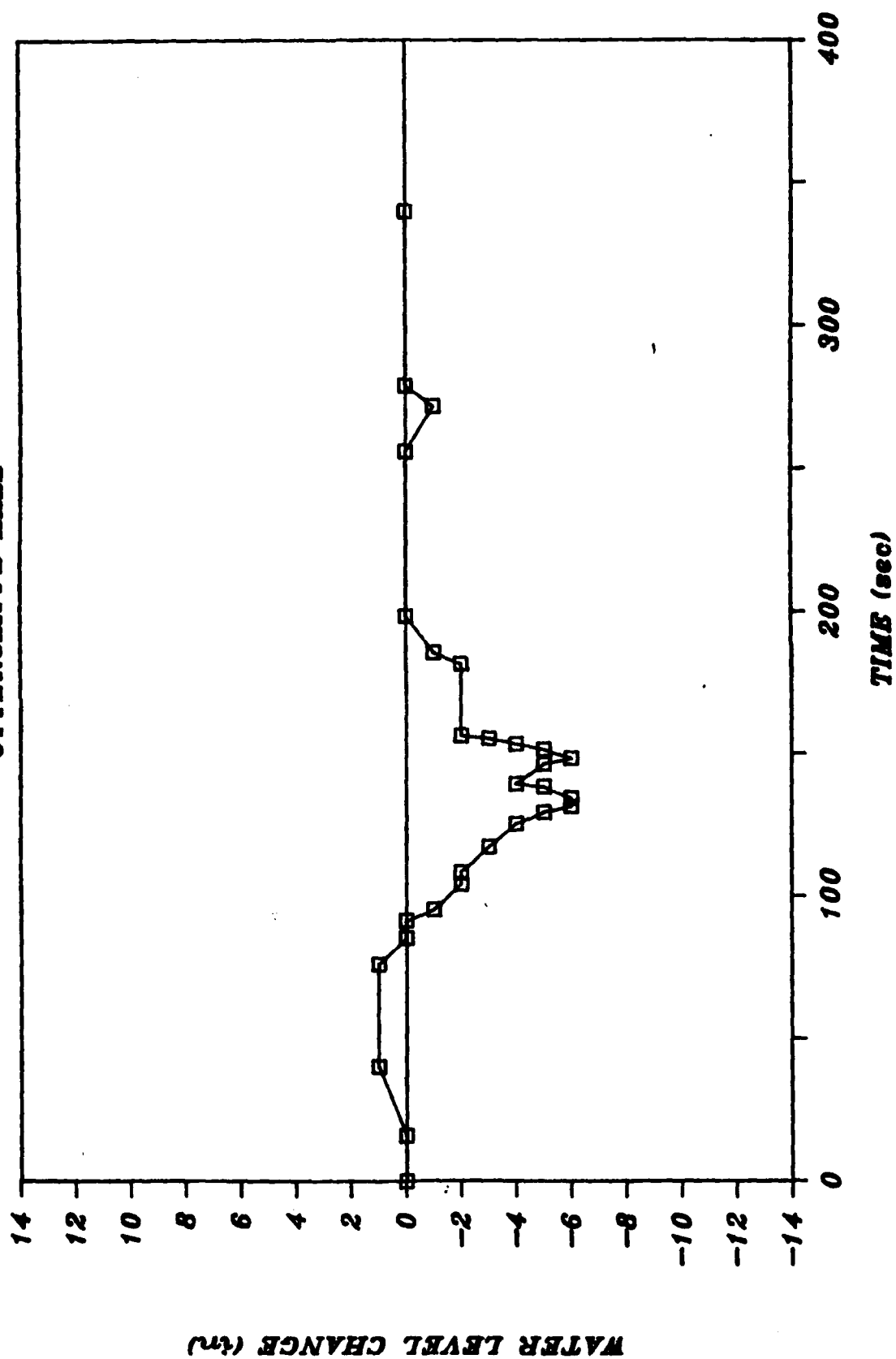
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	26.0	0.0
2	16.0	26.0	0.0
3	40.0	27.0	1.0
4	76.0	27.0	1.0
5	85.0	26.0	0.0
6	91.0	26.0	0.0
7	95.0	25.0	-1.0
8	104.0	24.0	-2.0
9	108.0	24.0	-2.0
10	117.0	23.0	-3.0
11	125.0	22.0	-4.0
12	129.0	21.0	-5.0
13	131.0	20.0	-6.0
14	134.0	20.0	-6.0
15	138.0	21.0	-5.0
16	139.0	22.0	-4.0
17	146.0	21.0	-5.0
18	148.0	20.0	-6.0
19	151.0	21.0	-5.0
20	153.0	22.0	-4.0

DRAWDOWN DATA (continued)

NAME OF SECTION WEST CELL DOCK
#####

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	155.0	23.0	-3.0
22	156.0	24.0	-2.0
23	181.0	24.0	-2.0
24	185.0	25.0	-1.0
25	198.0	26.0	0.0
26	256.0	26.0	0.0
27	272.0	25.0	-1.0
28	279.0	26.0	0.0
29	340.0	26.0	0.0

WEST CELL DOCK (red)
OTTERCLIFFE HALL



 DRAWDOWN DATA

NAME OF SECTION WEST CELL DOCK

DATE OF OBSERVATION 6/4/85

VESSEL NAME GEORGE A. STINSEN

DIRECTION UPBOUND

VESSEL LENGTH in feet = 1000

VESSEL BEAM in feet = 105

VESSEL DRAFT in feet = 19

VESSEL SPEED in feet/sec. = 12.82

BOW ON TIME in sec = 70

STERN ON TIME in sec = 148

DISTANCE TO STAFF GAUGE from green side in feet = 40

BACKGROUND READING in inches = 21

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	21.0	0.0
2	22.0	25.0	4.0
3	29.0	24.0	3.0
4	42.0	23.0	2.0
5	55.0	22.0	1.0
6	70.0	20.0	-1.0
7	84.0	17.0	-4.0
8	90.0	16.0	-5.0
9	92.0	15.0	-6.0
10	97.0	14.0	-7.0
11	101.0	13.0	-8.0
12	105.0	12.0	-9.0
13	109.0	11.0	-10.0
14	114.0	10.0	-11.0
15	121.0	10.0	-11.0
16	123.0	9.0	-12.0
17	126.0	9.0	-12.0
18	130.0	8.0	-13.0
19	134.0	8.0	-13.0
20	139.0	7.0	-14.0

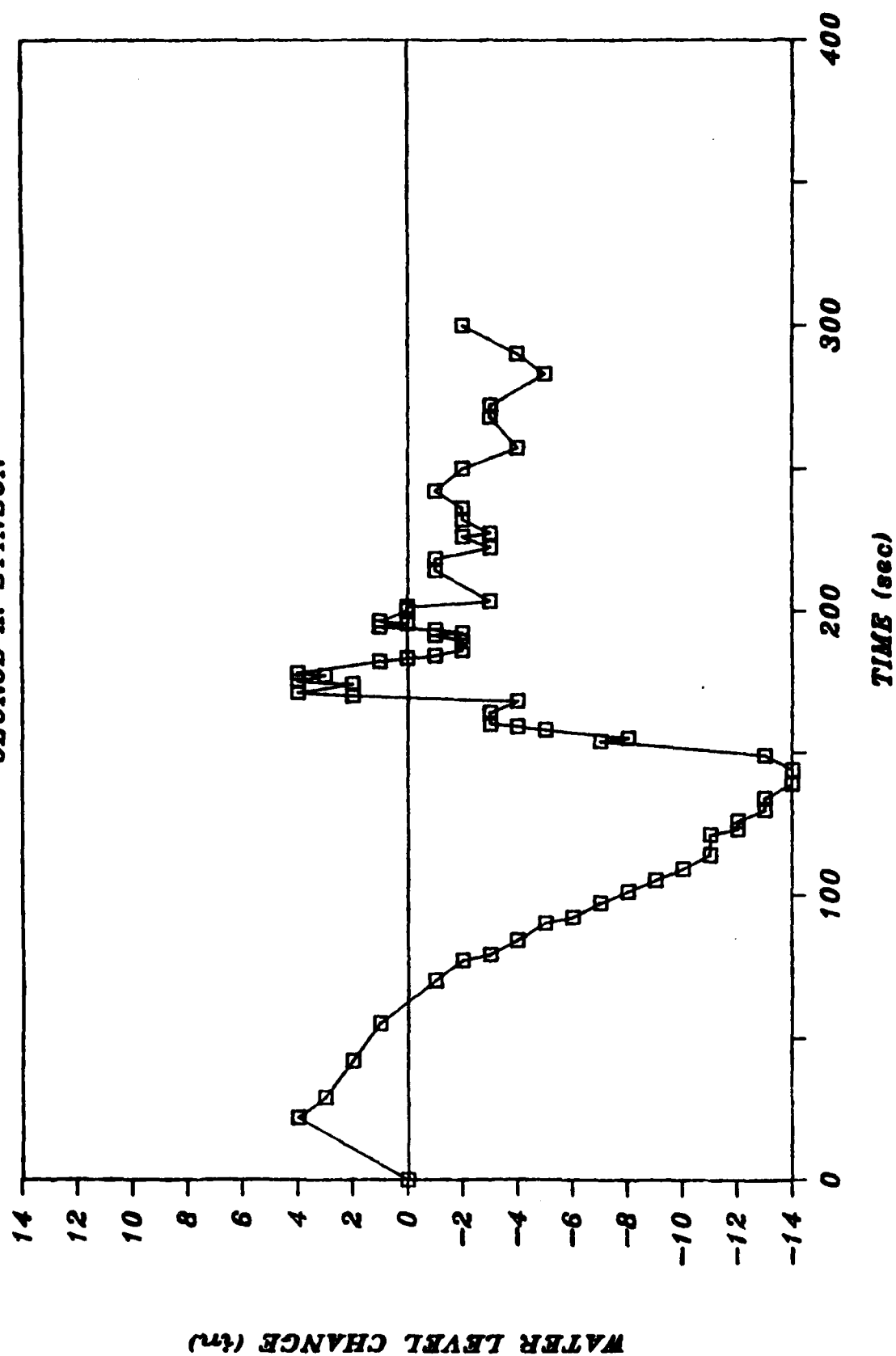
DRAWDOWN DATA (continued)

NAME OF SECTION WEST CELL DOCK

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	144.0	7.0	-14.0
22	149.0	8.0	-13.0
23	154.0	14.0	-7.0
24	155.0	13.0	-8.0
25	158.0	16.0	-5.0
26	159.0	17.0	-4.0
27	168.0	17.0	-4.0
28	170.0	23.0	2.0
29	171.0	25.0	4.0
30	174.0	23.0	2.0
31	175.0	25.0	4.0
32	177.0	24.0	3.0
33	178.0	25.0	4.0
34	182.0	22.0	1.0
35	183.0	21.0	0.0
36	184.0	20.0	-1.0
37	186.0	19.0	-2.0
38	189.0	19.0	-2.0
39	191.0	20.0	-1.0
40	192.0	19.0	-2.0
41	193.0	20.0	-1.0
42	194.0	24.0	3.0
43	195.0	21.0	0.0
44	196.0	22.0	1.0
45	200.0	21.0	0.0
46	201.0	21.0	0.0
47	202.0	18.0	-3.0
48	214.0	20.0	-1.0
49	218.0	20.0	-1.0
50	222.0	18.0	-3.0
51	226.0	19.0	-2.0
52	227.0	18.0	-3.0
53	232.0	19.0	-2.0
54	236.0	19.0	-2.0
55	242.0	20.0	-1.0
56	250.0	19.0	-2.0
57	257.0	17.0	-4.0
58	268.0	18.0	-3.0
59	272.0	18.0	-3.0
60	275.0	18.0	-3.0
61	283.0	16.0	-5.0
62	290.0	17.0	-4.0
63	300.0	19.0	-2.0

WEST CELL DOCK (green)

GEORGE A. STINSON



DRAWDOWN DATA

NAME OF SECTION WEST CELL DOCK

DATE OF OBSERVATION 6/4/85

VESSEL NAME GEORGE A. STINSON

DIRECTION UPBOUND

VESSEL LENGTH in feet = 1000

VESSEL BEAM in feet = 105

VESSEL DRAFT in feet = 19

VESSEL SPEED in feet/sec. = 12.82

BOW ON TIME in sec = 70

STERN ON TIME in sec = 148

DISTANCE TO STAFF GAUGE from green side in feet = 1395

BACKGROUND READING in inches = 23

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	23.0	0.0
2	17.0	23.0	0.0
3	47.0	23.0	0.0
4	60.0	22.0	-1.0
5	64.0	21.0	-2.0
6	70.0	20.0	-3.0
7	72.0	19.0	-4.0
8	76.0	18.0	-5.0
9	78.0	17.0	-6.0
10	80.0	16.0	-7.0
11	82.0	15.0	-8.0
12	84.0	14.0	-9.0
13	87.0	13.0	-10.0
14	90.0	12.0	-11.0
15	93.0	11.0	-12.0
16	95.0	11.0	-12.0
17	113.0	10.0	-13.0
18	129.0	10.0	-13.0
19	135.0	9.0	-14.0
20	137.0	8.0	-15.0

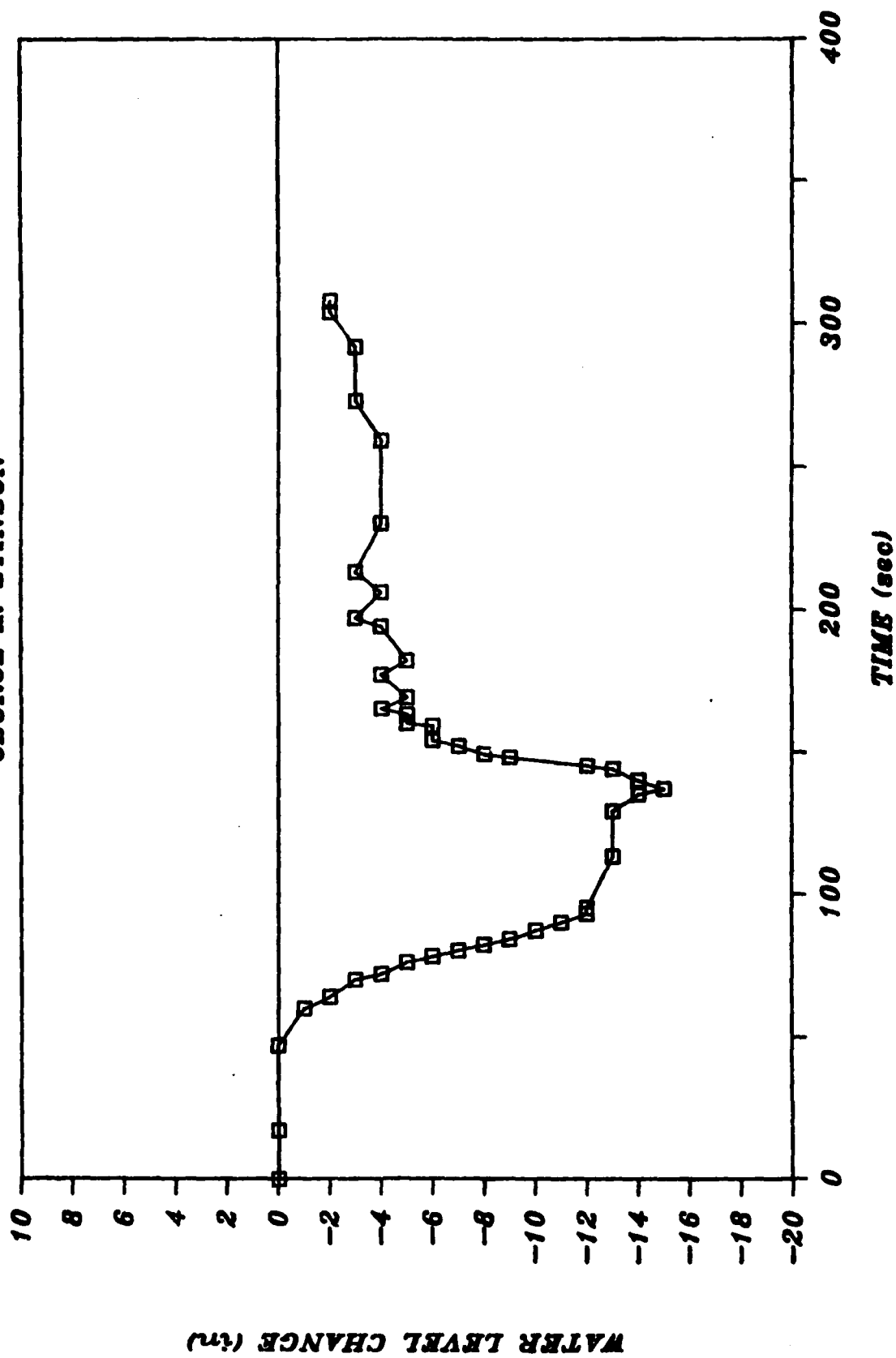
DRAWDOWN DATA (continued)

NAME OF SECTION WEST CELL DOCK

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	140.0	9.0	-14.0
22	144.0	10.0	-13.0
23	145.0	11.0	-12.0
24	148.0	14.0	-9.0
25	149.0	15.0	-8.0
26	152.0	16.0	-7.0
27	154.0	17.0	-6.0
28	159.0	17.0	-6.0
29	160.0	18.0	-5.0
30	163.0	18.0	-5.0
31	165.0	19.0	-4.0
32	169.0	18.0	-5.0
33	177.0	19.0	-4.0
34	182.0	18.0	-5.0
35	194.0	19.0	-4.0
36	197.0	20.0	-3.0
37	206.0	19.0	-4.0
38	213.0	20.0	-3.0
39	230.0	19.0	-4.0
40	259.0	19.0	-4.0
41	273.0	20.0	-3.0
42	292.0	20.0	-3.0
43	304.0	21.0	-2.0
44	308.0	21.0	-2.0

WEST CELL DOCK (red)

GEORGE A. STINSON



DRAWDOWN DATA

NAME OF SECTION	WEST CELL DOCK
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

DATE OF OBSERVATION 6/4/85

VESSEL NAME **CANADIAN OLYMPIC**

DIRECTION	UPBOUND
-----------	---------

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 20

VESSEL SPEED in feet/sec. = 13.04

BOW ON TIME in sec = 105

STERN ON TIME in sec = 161

DISTANCE TO STAFF GAUGE from green side in feet = 40

BACKGROUND READING in inches = 23

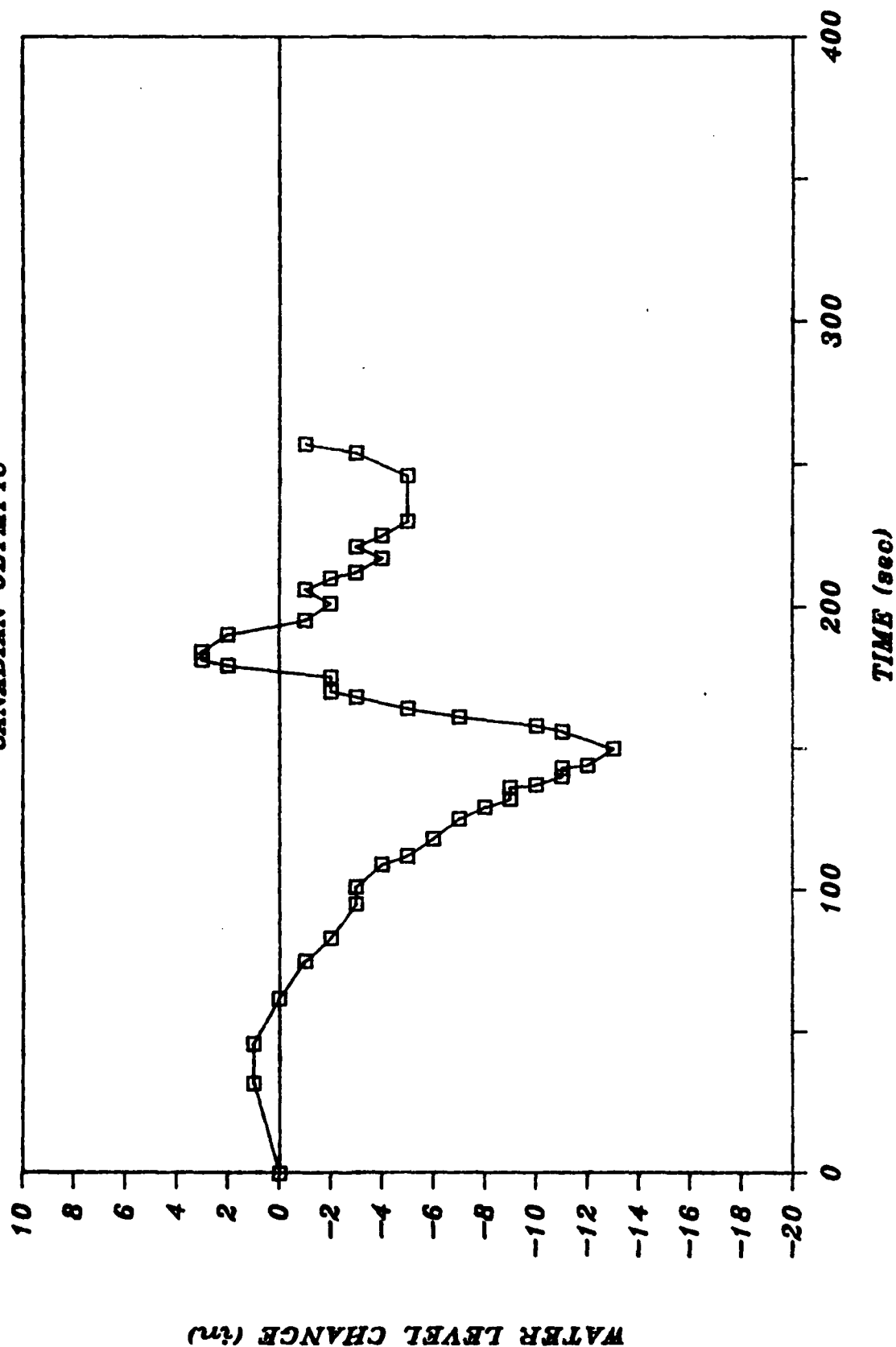
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	23.0	0.0
2	32.0	24.0	1.0
3	46.0	24.0	1.0
4	62.0	23.0	0.0
5	75.0	22.0	-1.0
6	83.0	21.0	-2.0
7	95.0	20.0	-3.0
8	101.0	20.0	-3.0
9	109.0	19.0	-4.0
10	112.0	18.0	-5.0
11	118.0	17.0	-6.0
12	125.0	16.0	-7.0
13	129.0	15.0	-8.0
14	132.0	14.0	-9.0
15	136.0	14.0	-9.0
16	137.0	13.0	-10.0
17	140.0	12.0	-11.0
18	143.0	12.0	-11.0
19	144.0	11.0	-12.0
20	150.0	10.0	-13.0

DRAWDOWN DATA (continued)

NAME OF SECTION WEST CELL DOCK

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	156.0	12.0	-11.0
22	158.0	13.0	-10.0
23	161.0	16.0	-7.0
24	164.0	18.0	-5.0
25	168.0	20.0	-3.0
26	170.0	21.0	-2.0
27	175.0	21.0	-2.0
28	179.0	25.0	2.0
29	181.0	26.0	3.0
30	184.0	26.0	3.0
31	190.0	25.0	2.0
32	195.0	22.0	-1.0
33	201.0	21.0	-2.0
34	206.0	22.0	-1.0
35	210.0	21.0	-2.0
36	212.0	20.0	-3.0
37	217.0	19.0	-4.0
38	221.0	20.0	-3.0
39	225.0	19.0	-4.0
40	230.0	18.0	-5.0
41	246.0	18.0	-5.0
42	254.0	20.0	-3.0
43	257.0	22.0	-1.0

WEST CELL DOCK (green)
CANADIAN OLYMPIC



DRAWDOWN DATA

NAME OF SECTION WEST CELL DOCK

DATE OF OBSERVATION 6/4/85

VESSEL NAME CANADIAN OLYMPIC

DIRECTION UPBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 20

VESSEL SPEED in feet/sec. = 13.04

BOW ON TIME in sec = 105

STERN ON TIME in sec = 161

DISTANCE TO STAFF GAUGE from green side in feet = 1395

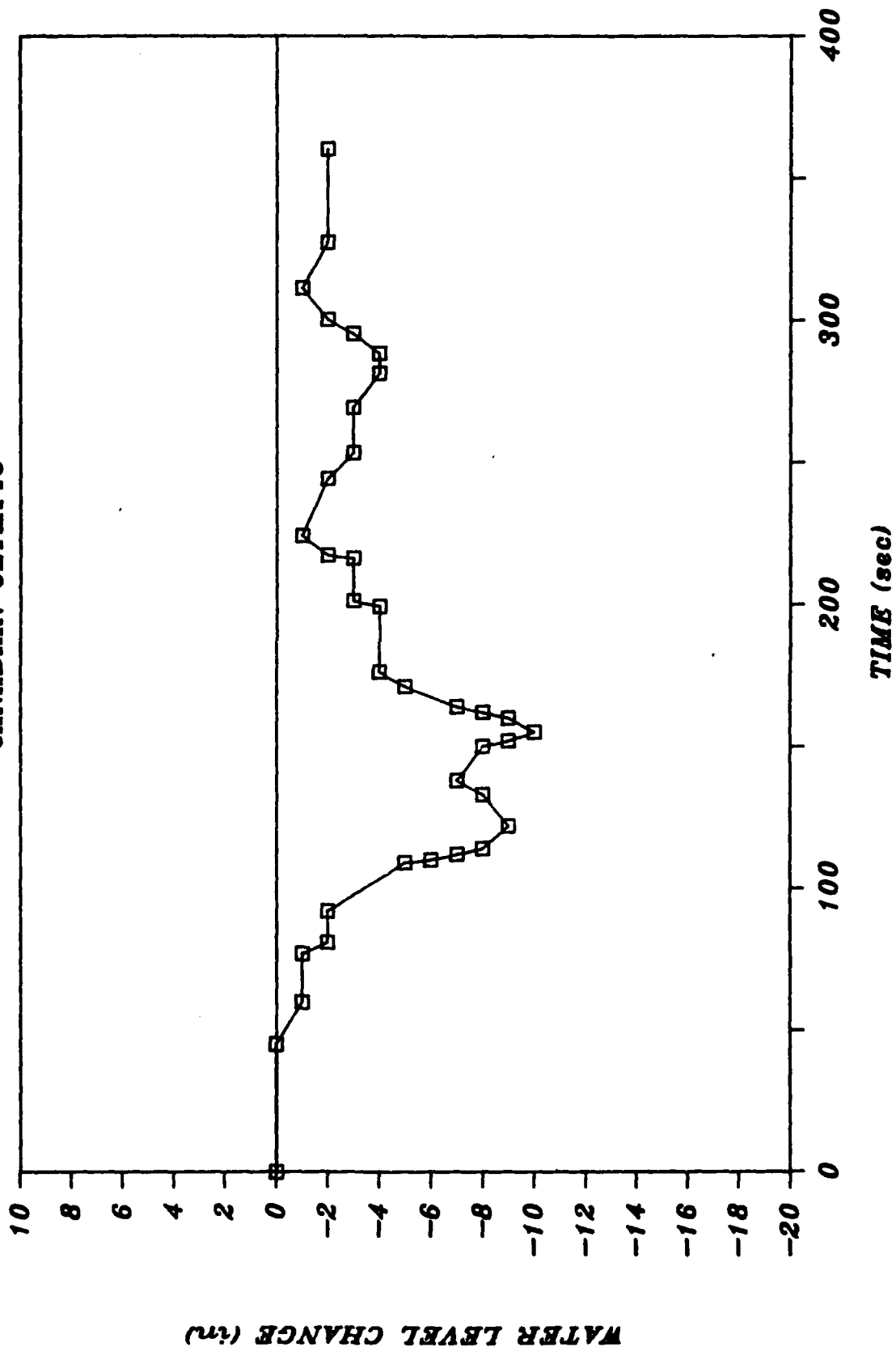
BACKGROUND READING in inches = 23

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	23.0	0.0
2	45.0	23.0	0.0
3	60.0	22.0	-1.0
4	77.0	22.0	-1.0
5	81.0	21.0	-2.0
6	92.0	21.0	-2.0
7	109.0	18.0	-5.0
8	110.0	17.0	-6.0
9	112.0	16.0	-7.0
10	114.0	15.0	-8.0
11	122.0	14.0	-9.0
12	133.0	15.0	-8.0
13	138.0	16.0	-7.0
14	150.0	15.0	-8.0
15	152.0	14.0	-9.0
16	155.0	13.0	-10.0
17	160.0	14.0	-9.0
18	162.0	15.0	-8.0
19	164.0	16.0	-7.0
20	171.0	18.0	-5.0

NAME OF SECTION WEST CELL DOCK

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	176.0	19.0	-4.0
22	199.0	19.0	-4.0
23	201.0	20.0	-3.0
24	216.0	20.0	-3.0
25	217.0	21.0	-2.0
26	224.0	22.0	-1.0
27	244.0	21.0	-2.0
28	253.0	20.0	-3.0
29	269.0	20.0	-3.0
30	281.0	19.0	-4.0
31	288.0	19.0	-4.0
32	295.0	20.0	-3.0
33	300.0	21.0	-2.0
34	311.0	22.0	-1.0
35	327.0	21.0	-2.0
36	360.0	21.0	-2.0

WEST CELL DOCK (red)
CANADIAN OLYMPIC



oo

DRAWDOWN DATA

NAME OF SECTION WEST CELL DOCK
oo

DATE OF OBSERVATION 6/4/85

VESSEL NAME ELMGLEN

DIRECTION UPBOUND

VESSEL LENGTH in feet = 604

VESSEL BEAM in feet = 60

VESSEL DRAFT in feet = 14

VESSEL SPEED in feet/sec. = 14.9?

BOW ON TIME in sec = 74

STERN ON TIME in sec = 123

DISTANCE TO STAFF GAUGE from green side in feet = 40

BACKGROUND READING in inches = 23

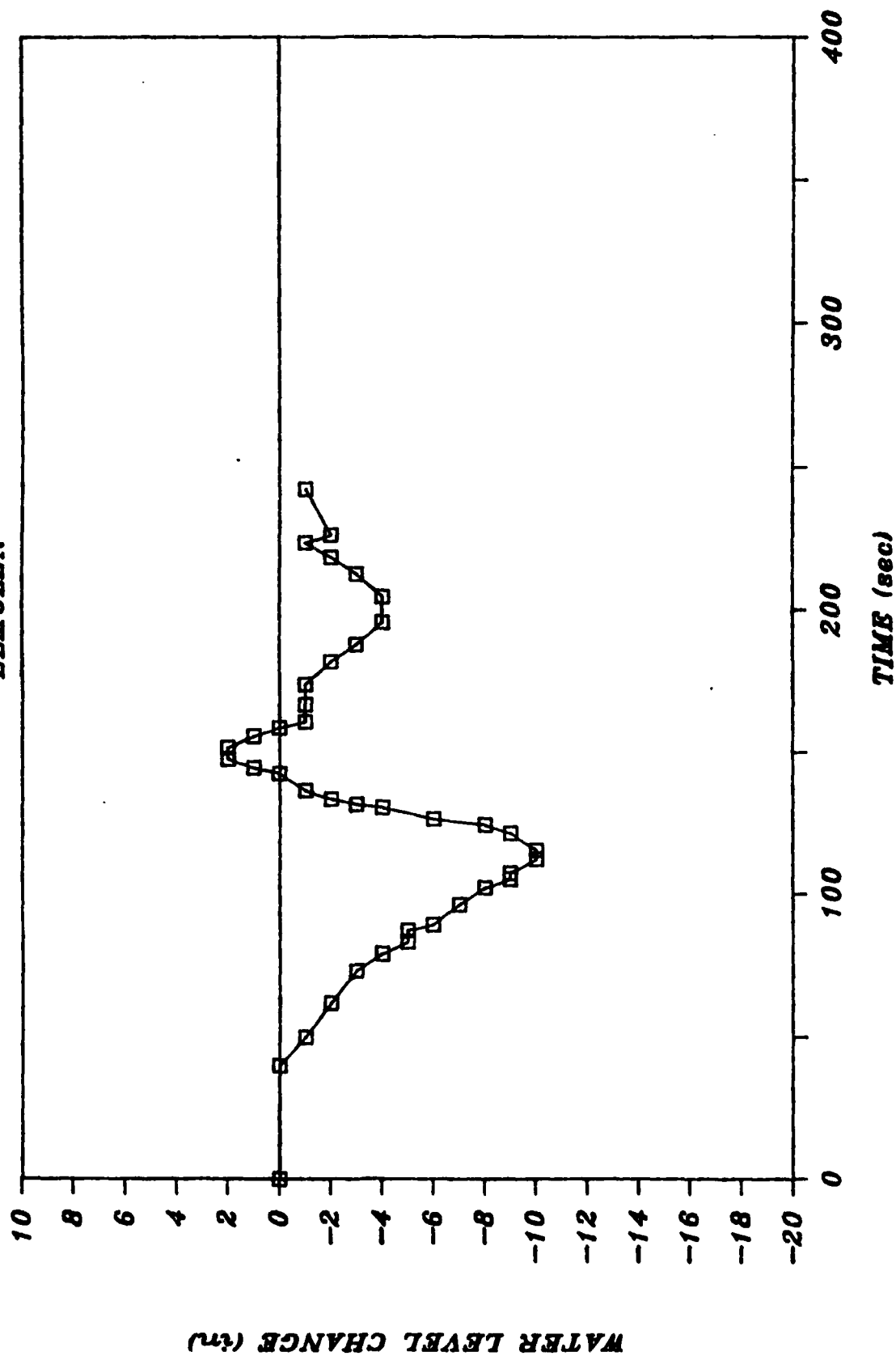
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	23.0	0.0
2	40.0	23.0	0.0
3	50.0	22.0	-1.0
4	62.0	21.0	-2.0
5	73.0	20.0	-3.0
6	79.0	19.0	-4.0
7	83.0	18.0	-5.0
8	87.0	18.0	-5.0
9	89.0	17.0	-6.0
10	96.0	19.0	-4.0
11	102.0	15.0	-8.0
12	105.0	14.0	-9.0
13	107.0	14.0	-9.0
14	112.0	13.0	-10.0
15	115.0	13.0	-10.0
16	121.0	14.0	-9.0
17	124.0	15.0	-8.0
18	126.0	17.0	-6.0
19	130.0	19.0	-4.0
20	131.0	20.0	-3.0

DRAWDOWN DATA (continued)

NAME OF SECTION WEST CELL DOCK

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	133.0	21.0	-2.0
22	136.0	22.0	-1.0
23	142.0	23.0	0.0
24	144.0	24.0	1.0
25	147.0	25.0	2.0
26	151.0	25.0	2.0
27	155.0	24.0	1.0
28	158.0	23.0	0.0
29	160.0	22.0	-1.0
30	166.0	22.0	-1.0
31	173.0	22.0	-1.0
32	181.0	21.0	-2.0
33	187.0	20.0	-3.0
34	195.0	19.0	-4.0
35	204.0	19.0	-4.0
36	212.0	20.0	-3.0
37	218.0	21.0	-2.0
38	223.0	22.0	-1.0
39	226.0	21.0	-2.0
40	242.0	22.0	-1.0

WEST CELL DOCK (green)
ELMGLN



DRAWDOWN DATA

NAME OF SECTION WEST CELL DOCK

DATE OF OBSERVATION 6/4/85

VESSEL NAME ELMGLEN

DIRECTION UPBOUND

VESSEL LENGTH in feet = 604

VESSEL BEAM in feet = 60

VESSEL DRAFT in feet = 14

VESSEL SPEED in feet/sec. = 14.9 ?

BOW ON TIME in sec = 74

STERN ON TIME in sec = 123

DISTANCE TO STAFF GAUGE from green side in feet = 1395

BACKGROUND READING in inches = 22

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	22.0	0.0
2	31.0	22.0	0.0
3	47.0	21.0	-1.0
4	61.0	21.0	-1.0
5	68.0	20.0	-2.0
6	77.0	19.0	-3.0
7	80.0	18.0	-4.0
8	84.0	17.0	-5.0
9	89.0	16.0	-6.0
10	95.0	17.0	-5.0
11	103.0	18.0	-4.0
12	110.0	18.0	-4.0
13	116.0	17.0	-5.0
14	126.0	18.0	-4.0
15	131.0	19.0	-3.0
16	138.0	20.0	-2.0
17	155.0	20.0	-2.0
18	162.0	21.0	-1.0
19	167.0	21.0	-1.0
20	171.0	20.0	-2.0

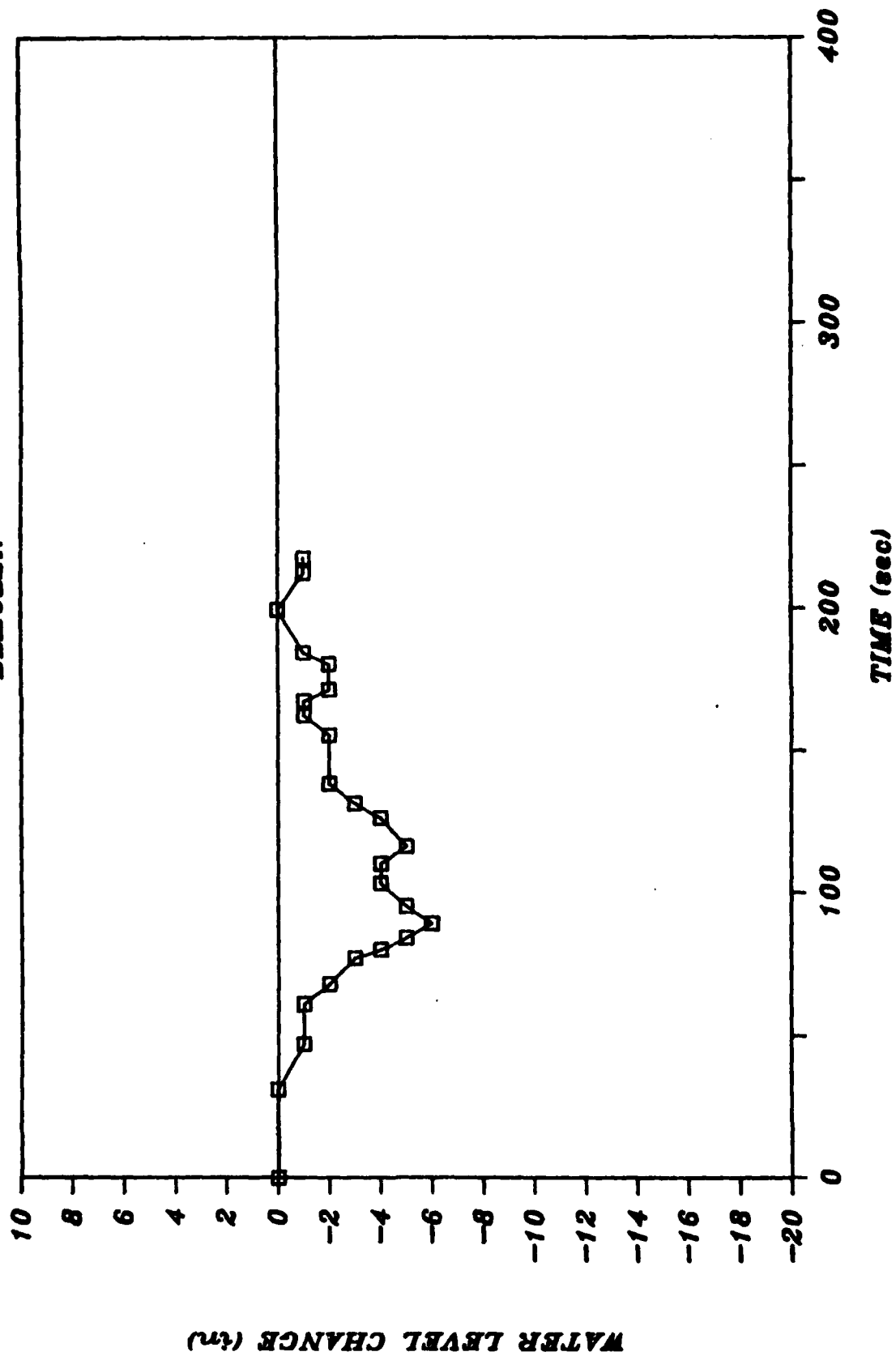
DRAWDOWN DATA (continued)

NAME OF SECTION WEST CELL DOCK

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	180.0	20.0	-2.0
22	184.0	21.0	-1.0
23	199.0	22.0	0.0
24	212.0	21.0	-1.0

WEST CELL DOCK (red)

BLMGLN




~~~~~  
 DRAWDOWN DATA

NAME OF SECTION      WEST CELL DOCK  
 ~~~~~

DATE OF OBSERVATION 6/4/85

VESSEL NAME LEWIS WILSON FOY

DIRECTION UPBOUND

VESSEL LENGTH in feet = 1000

VESSEL BEAM in feet = 105

VESSEL DRAFT in feet = 21

VESSEL SPEED in feet/sec. = 9.17

BOW ON TIME in sec = 103

STERN ON TIME in sec = 212

DISTANCE TO STAFF GAUGE from green side in feet = 40

BACKGROUND READING in inches = 23

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	23.0	0.0
2	25.0	23.0	0.0
3	48.0	22.0	-1.0
4	58.0	22.0	-1.0
5	68.0	21.0	-2.0
6	80.0	20.0	-3.0
7	86.0	20.0	-3.0
8	92.0	19.0	-4.0
9	109.0	18.0	-5.0
10	122.0	18.0	-5.0
11	134.0	17.0	-6.0
12	146.0	16.0	-7.0
13	155.0	17.0	-6.0
14	167.0	16.0	-7.0
15	173.0	17.0	-6.0
16	185.0	17.0	-6.0
17	194.0	18.0	-5.0
18	205.0	17.0	-6.0
19	209.0	18.0	-5.0
20	239.0	18.0	-5.0

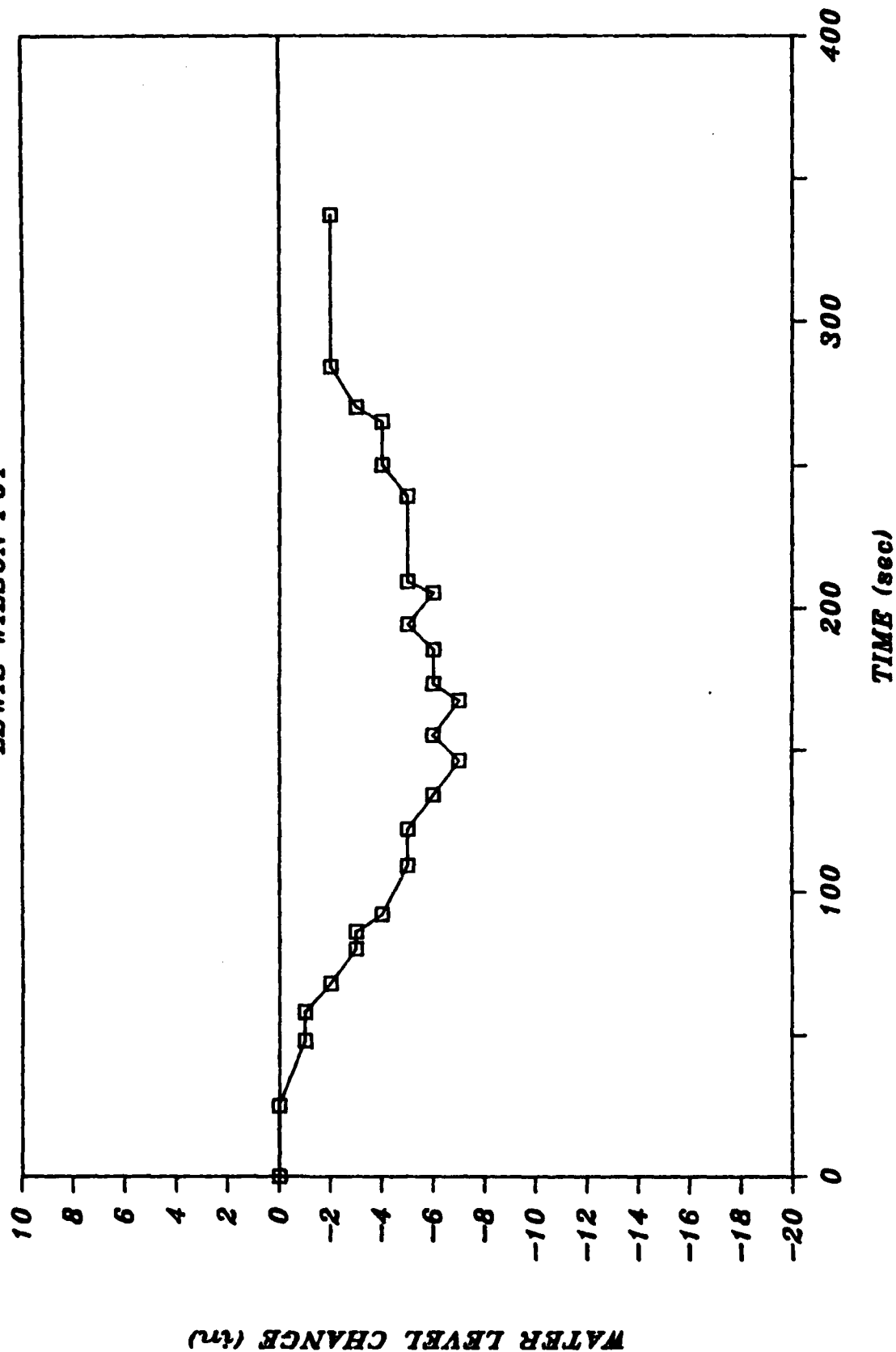
.....
 DRAWDOWN DATA (continued)

NAME OF SECTION WEST CELL DOCK

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	250.0	19.0	-4.0
22	265.0	19.0	-4.0
23	270.0	20.0	-3.0
24	284.0	21.0	-2.0
25	337.0	21.0	-2.0

WEST CELL DOCK (green)

LEWIS WILSON FOY



oo

DRAWDOWN DATA

NAME OF SECTION WEST CELL DOCK

oo

DATE OF OBSERVATION 6/4/85

VESSEL NAME LEWIS WILSON FOY

DIRECTION UPBOUND

VESSEL LENGTH in feet = 1000

VESSEL BEAM in feet = 105

VESSEL DRAFT in feet = 21

VESSEL SPEED in feet/sec. = 9.17

BOW ON TIME in sec = 103

STERN ON TIME in sec = 212

DISTANCE TO STAFF GAUGE from green side in feet = 1395

BACKGROUND READING in inches = 23

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	23.0	0.0
2	18.0	23.0	0.0
3	31.0	22.0	-1.0
4	62.0	22.0	-1.0
5	77.0	21.0	-2.0
6	95.0	20.0	-3.0
7	101.0	19.0	-4.0
8	106.0	18.0	-5.0
9	111.0	18.0	-5.0
10	118.0	17.0	-6.0
11	122.0	16.0	-7.0
12	138.0	16.0	-7.0
13	145.0	15.0	-8.0
14	164.0	15.0	-8.0
15	174.0	14.0	-9.0
16	197.0	14.0	-9.0
17	208.0	16.0	-7.0
18	212.0	17.0	-6.0
19	223.0	19.0	-4.0
20	232.0	19.0	-4.0

oo

DRAWDOWN DATA (continued)

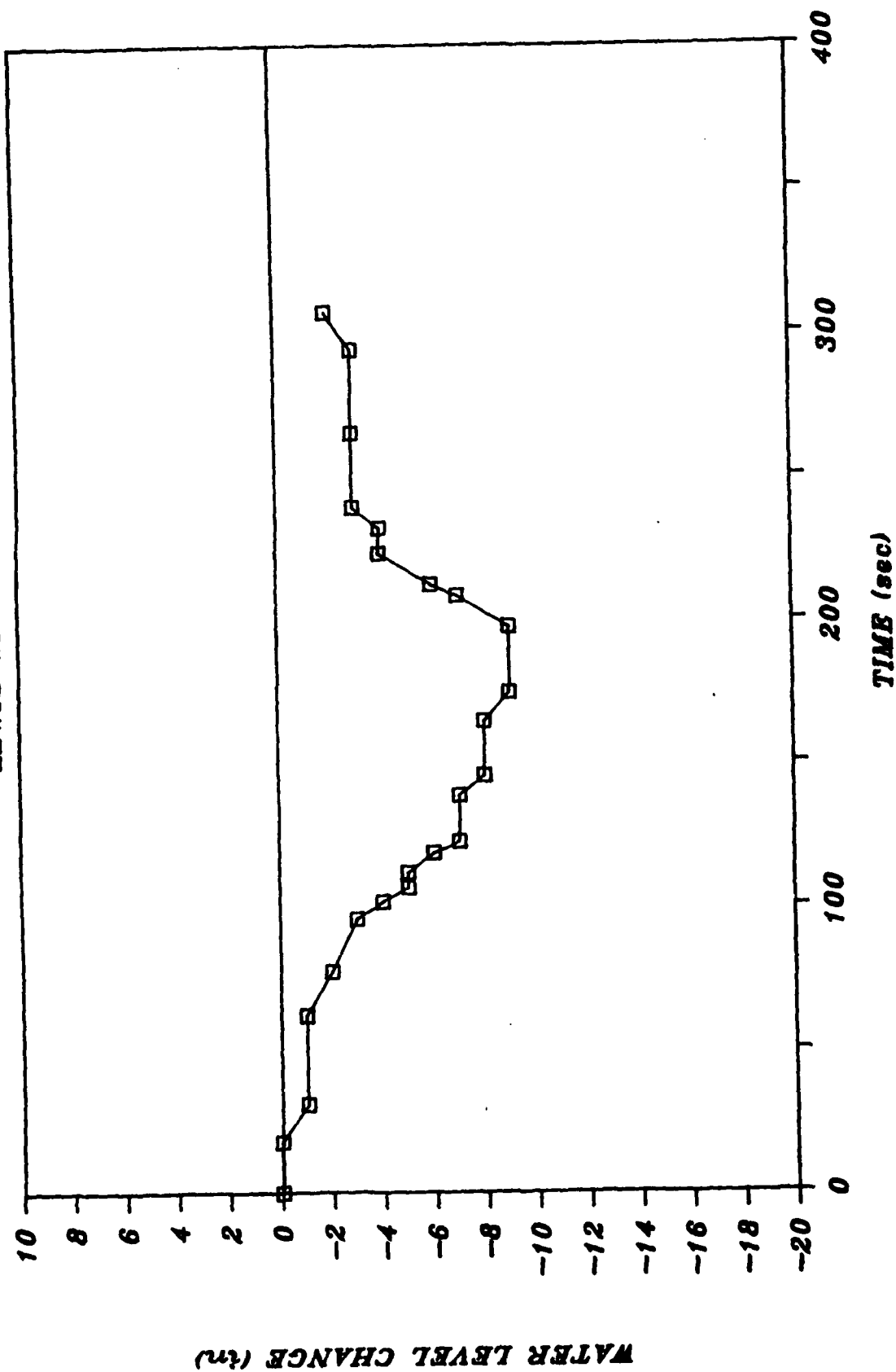
NAME OF SECTION WEST CELL DOCK

oo

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	239.0	20.0	-3.0
22	265.0	20.0	-3.0
23	294.0	20.0	-3.0
24	307.0	21.0	-2.0

WEST CELL DOCK (red)

LEWIS WILSON FOY



DRAWDOWN DATA

NAME OF SECTION	WEST CELL DOCK
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

VESSEL NAME **COLUMBIA STAR**

VESSEL LENGTH in feet = 1000

VESSEL DRAFT in feet = 17.5

BOW ON TIME in sec = 53

DISTANCE TO STAFF GAUGE from green side in feet = 40

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	23.0	0.0
2	59.0	23.0	0.0
3	61.0	22.0	-1.0
4	75.0	21.0	-2.0
5	92.0	21.0	-2.0
6	105.0	20.0	-3.0
7	106.0	19.0	-4.0
8	108.0	18.0	-5.0
9	113.0	18.0	-5.0
10	115.0	17.0	-6.0
11	118.0	17.0	-6.0
12	122.0	16.0	-7.0
13	129.0	15.0	-8.0
14	133.0	15.0	-8.0
15	144.0	16.0	-7.0
16	149.0	16.0	-7.0
17	156.0	17.0	-6.0
18	159.0	18.0	-5.0
19	162.0	19.0	-4.0
20	164.0	20.0	-3.0

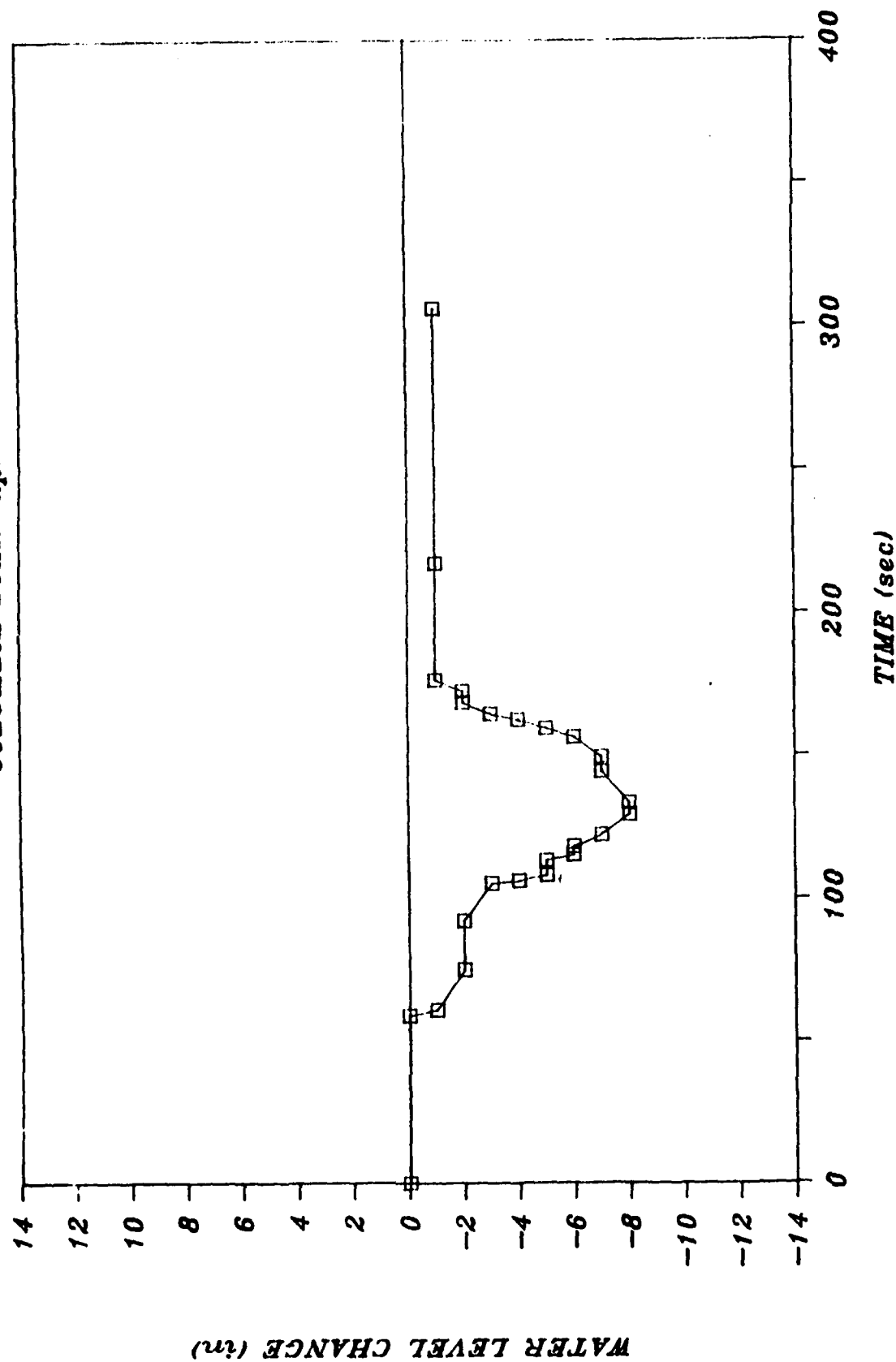
DRAWDOWN DATA (continued)

NAME OF SECTION WEST CELL DOCK

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	168.0	21.0	-2.0
22	172.0	21.0	-2.0
23	176.0	22.0	-1.0
24	217.0	22.0	-1.0
25	306.0	22.0	-1.0

WEST CELL DOCK (green)

COLUMBIA STAR (wp)



DRAWDOWN DATA

NAME OF SECTION WEST CELL DOCK

DATE OF OBSERVATION 6/26/85

VESSEL NAME LEWIS WILSON FOY

DIRECTION UPBOUND

VESSEL LENGTH in feet = 1000

VESSEL BEAM in feet = 105

VESSEL DRAFT in feet = 19.5

VESSEL SPEED in feet/sec. = 8.77

BOW ON TIME in sec = 80

STERN ON TIME in sec = 194

DISTANCE TO STAFF GAUGE from green side in feet = 40

BACKGROUND READING in inches = 25

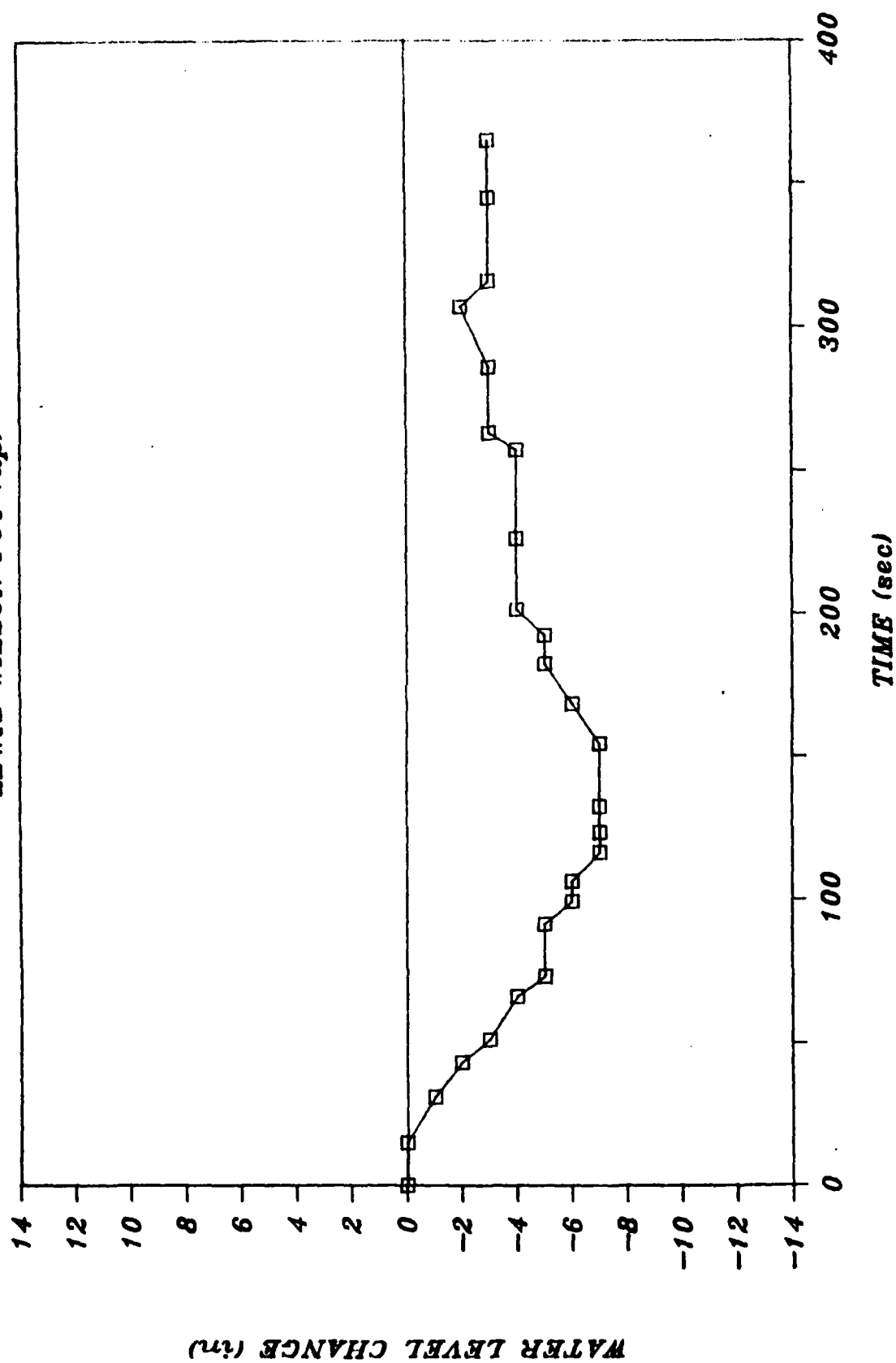
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	25.0	0.0
2	15.0	25.0	0.0
3	31.0	24.0	-1.0
4	43.0	23.0	-2.0
5	51.0	22.0	-3.0
6	66.0	21.0	-4.0
7	73.0	20.0	-5.0
8	91.0	20.0	-5.0
9	99.0	19.0	-6.0
10	106.0	19.0	-6.0
11	116.0	18.0	-7.0
12	123.0	18.0	-7.0
13	132.0	18.0	-7.0
14	154.0	18.0	-7.0
15	168.0	19.0	-6.0
16	182.0	20.0	-5.0
17	192.0	20.0	-5.0
18	201.0	21.0	-4.0
19	226.0	21.0	-4.0
20	257.0	21.0	-4.0

NAME OF SECTION WEST CELL DOCK

BF58

WEST CELL DOCK (green)

LEWIS WILSON FOY (wp)



DRAWDOWN DATA

NAME OF SECTION	WEST CELL DOCK
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

DATE OF OBSERVATION 6/28/85

VESSEL NAME PATERSON

DIRECTION	UPBOUND
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

VESSEL LENGTH in feet = 575

VESSEL BEAM in feet = 59

VESSEL DRAFT in feet = 16.5

VEHICLE SPEED in feet/sec. = 10.09

BOW ON TIME in sec = 42

STERN ON TIME in sec = 99

DISTANCE TO STAFF GAUGE from green side in feet = 40

BACKGROUND READING in inches = 19.5

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	19.5	0.0
2	10.0	20.0	0.5
3	21.0	20.0	0.5
4	27.0	20.0	0.5
5	46.0	18.0	-1.5
6	50.0	17.0	-2.5
7	55.0	16.0	-3.5
8	61.0	15.0	-4.5
9	65.0	14.0	-5.5
10	69.0	13.0	-6.5
11	76.0	12.0	-7.5
12	79.0	11.5	-8.0
13	80.0	11.0	-8.5
14	84.0	10.5	-9.0
15	87.0	10.0	-9.5
16	91.0	10.0	-9.5
17	103.0	12.0	-7.5
18	109.0	14.0	-5.5
19	113.0	15.0	-4.5
20	119.0	18.0	-1.5

oo

DRAWDOWN DATA (continued)

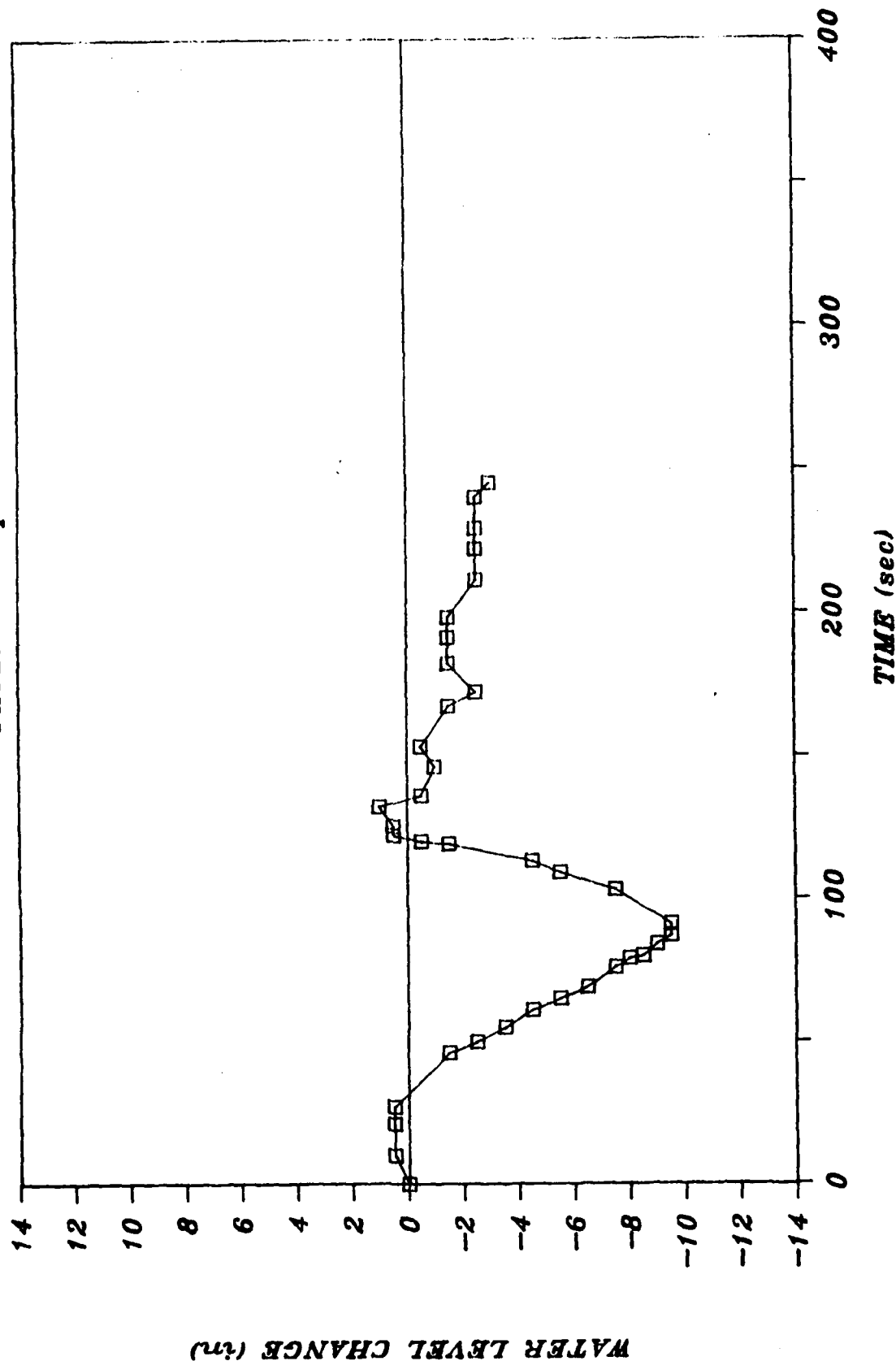
NAME OF SECTION WEST CELL DOCK

oo

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	120.0	19.0	-0.5
22	122.0	20.0	0.5
23	125.0	20.0	0.5
24	132.0	20.5	1.0
25	136.0	19.0	-0.5
26	146.0	18.5	-1.0
27	153.0	19.0	-0.5
28	167.0	18.0	-1.5
29	172.0	17.0	-2.5
30	182.0	18.0	-1.5
31	191.0	18.0	-1.5
32	198.0	18.0	-1.5
33	211.0	17.0	-2.5
34	222.0	17.0	-2.5
35	229.0	17.0	-2.5
36	240.0	17.0	-2.5
37	245.0	16.5	-3.0

WEST CELL DOCK (green)

PATERSON (wp)



DRAWDOWN DATA

NAME OF SECTION	WEST CELL DOCK
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

DATE OF OBSERVATION 6/28/85

VESSEL NAME PATERSON

DIRECTION	UPBOUND
-----------	---------

VESSEL LENGTH in feet = 575

VESSEL BEAM in feet = 59

VESSEL DRAFT in feet = 16.5

VESSEL SPEED in feet/sec. = 10.09

BOW ON TIME in sec = 42

STERN ON TIME in sec = 99

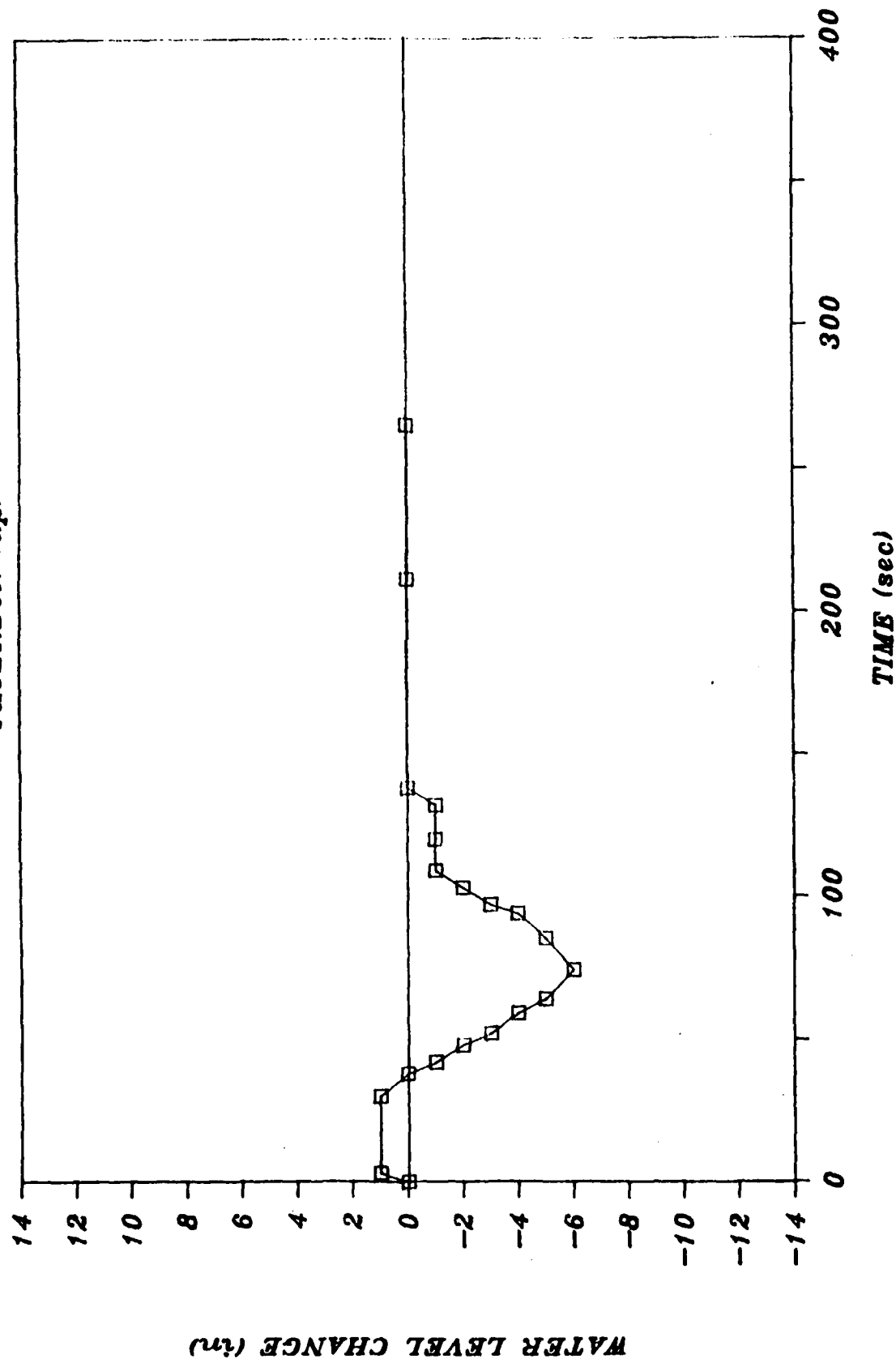
DISTANCE TO STAFF GAUGE from green side in feet = 1395

BACKGROUND READING in inches = 23

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	23.0	0.0
2	3.0	24.0	1.0
3	30.0	24.0	1.0
4	38.0	23.0	0.0
5	42.0	22.0	-1.0
6	48.0	21.0	-2.0
7	52.0	20.0	-3.0
8	59.0	19.0	-4.0
9	64.0	18.0	-5.0
10	74.0	17.0	-6.0
11	85.0	18.0	-5.0
12	94.0	19.0	-4.0
13	97.0	20.0	-3.0
14	103.0	21.0	-2.0
15	109.0	22.0	-1.0
16	120.0	22.0	-1.0
17	132.0	22.0	-1.0
18	138.0	23.0	0.0
19	211.0	23.0	0.0
20	265.0	23.0	0.0

WEST CELL DOCK (red)

PATERSON (wp)



DRAWDOWN DATA

NAME OF SECTION WEST CELL DOCK

DATE OF OBSERVATION 6/28/85

VESSEL NAME GEORGE A. STINSON

DIRECTION UPBOUND

VESSEL LENGTH in feet = 1000

VESSEL BEAM in feet = 105

VESSEL DRAFT in feet = 18.5

VESSEL SPEED in feet/sec. = 11.76

BOW ON TIME in sec = 53

STERN ON TIME in sec = 138

DISTANCE TO STAFF GAUGE from green side in feet = 40

BACKGROUND READING in inches = 19

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	19.0	0.0
2	11.0	20.5	1.5
3	22.0	19.5	0.5
4	32.0	18.0	-1.0
5	41.0	16.5	-2.5
6	58.0	13.0	-6.0
7	61.0	12.0	-7.0
8	66.0	11.5	-7.5
9	69.0	11.0	-8.0
10	75.0	11.0	-8.0
11	77.0	10.5	-8.5
12	81.0	10.0	-9.0
13	100.0	10.0	-9.0
14	106.0	11.0	-8.0
15	114.0	12.0	-7.0
16	116.0	13.0	-6.0
17	118.0	24.0	5.0
18	123.0	15.0	-4.0
19	126.0	17.0	-2.0
20	133.0	17.0	-2.0

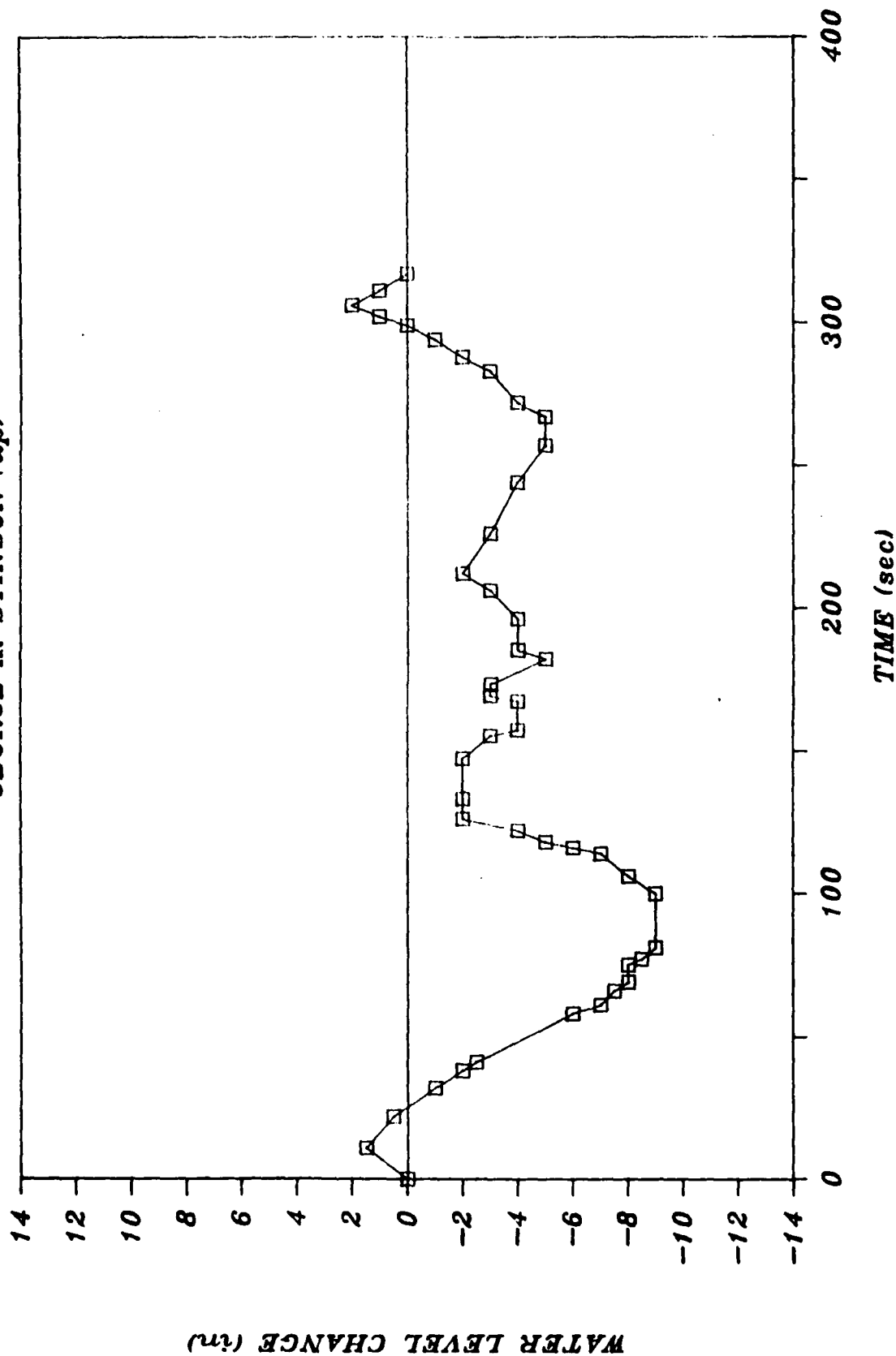
DRAWDOWN DATA (continued)

NAME OF SECTION WEST CELL DOCK

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	147.0	17.0	-2.0
22	155.0	16.0	-3.0
23	157.0	15.0	-4.0
24	167.0	15.0	-4.0
25	169.0	16.0	-3.0
26	173.0	16.0	-3.0
27	182.0	14.0	-5.0
28	185.0	15.0	-4.0
29	196.0	15.0	-4.0
30	206.0	16.0	-3.0
31	212.0	17.0	-2.0
32	226.0	16.0	-3.0
33	244.0	15.0	-4.0
34	257.0	14.0	-5.0
35	267.0	14.0	-5.0
36	272.0	15.0	-4.0
37	283.0	16.0	-3.0
38	288.0	17.0	-2.0
39	294.0	18.0	-1.0
40	299.0	19.0	0.0
41	302.0	20.0	1.0
42	306.0	21.0	2.0
43	311.0	20.0	1.0
44	317.0	19.0	0.0

WEST CELL DOCK (green)

GEORGE A. STINSON (wp)



DRAWDOWN DATA

NAME OF SECTION WEST CELL DOCK

DATE OF OBSERVATION 6/28/85

VESSEL NAME GEORGE A. STINSON

DIRECTION UPBOUND

VESSEL LENGTH in feet = 1000

VESSEL BEAM in feet = 105

VESSEL DRAFT in feet = 18.5

VESSEL SPEED in feet/sec. = 11.76

BOW ON TIME in sec = 53

STERN ON TIME in sec = 138

DISTANCE TO STAFF GAUGE from green side in feet = 1395

BACKGROUND READING in inches = 29

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	29.0	0.0
2	16.0	28.0	-1.0
3	33.0	27.0	-2.0
4	48.0	27.0	-2.0
5	52.0	26.0	-3.0
6	58.0	25.0	-4.0
7	59.0	24.0	-5.0
8	63.0	23.0	-6.0
9	64.0	22.0	-7.0
10	71.0	21.0	-8.0
11	76.0	20.0	-9.0
12	81.0	21.0	-8.0
13	90.0	21.0	-8.0
14	98.0	21.0	-8.0
15	107.0	20.0	-9.0
16	108.0	19.0	-10.0
17	109.0	18.0	-11.0
18	110.0	17.0	-12.0
19	119.0	17.0	-12.0
20	120.0	18.0	-11.0

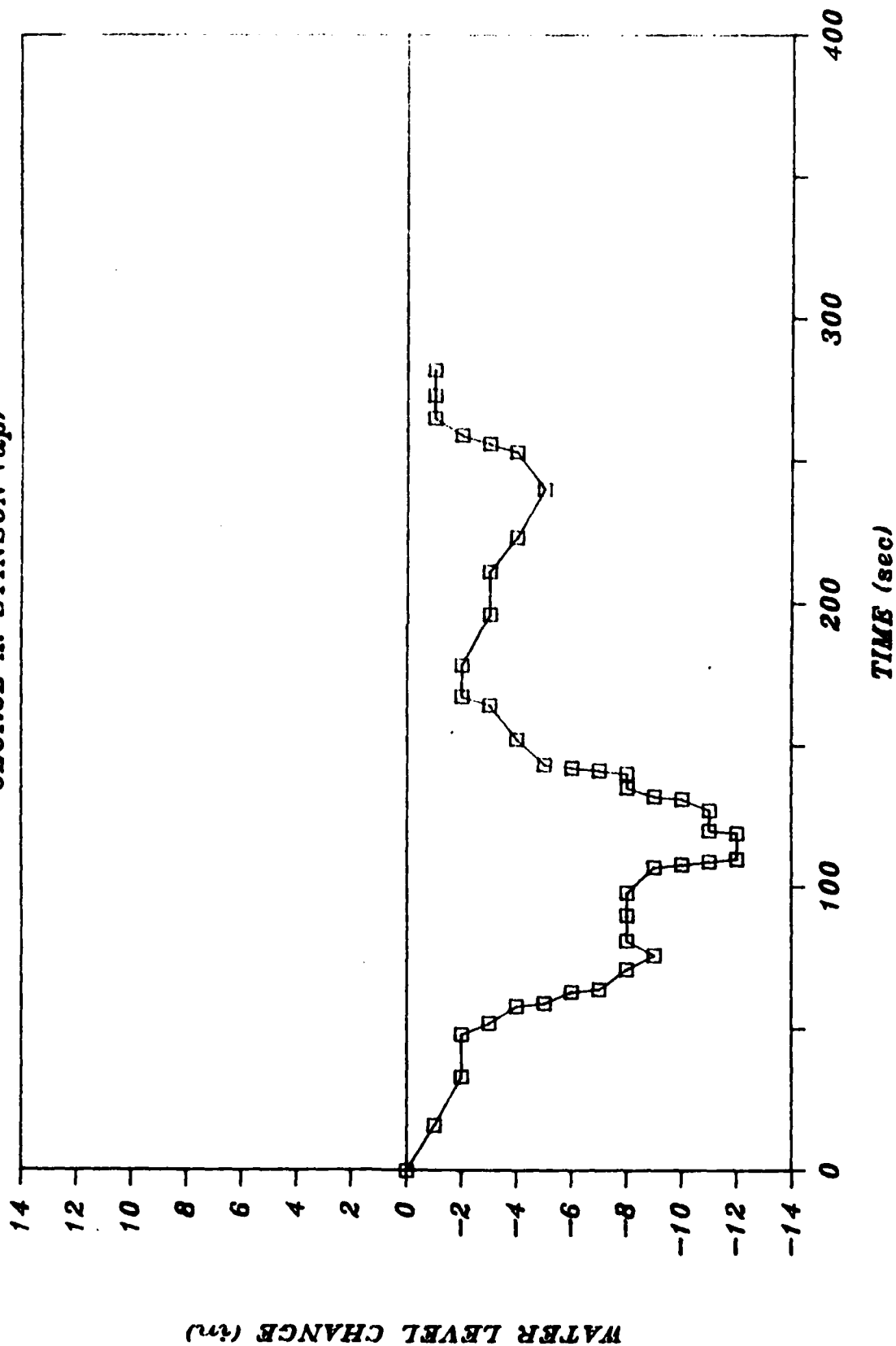
DRAWDOWN DATA (continued)

NAME OF SECTION WEST CELL DOCK

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	127.0	18.0	-11.0
22	131.0	19.0	-10.0
23	132.0	20.0	-9.0
24	135.0	21.0	-8.0
25	140.0	21.0	-8.0
26	141.0	22.0	-7.0
27	142.0	23.0	-6.0
28	143.0	24.0	-5.0
29	152.0	25.0	-4.0
30	164.0	26.0	-3.0
31	167.0	27.0	-2.0
32	178.0	27.0	-2.0
33	196.0	26.0	-3.0
34	211.0	26.0	-3.0
35	223.0	25.0	-4.0
36	240.0	24.0	-5.0
37	253.0	25.0	-4.0
38	256.0	26.0	-3.0
39	259.0	27.0	-2.0
40	265.0	28.0	-1.0
41	273.0	28.0	-1.0
42	282.0	28.0	-1.0

WEST CELL DOCK (red)

GEORGE A. STINSON (wp)



DRAWDOWN DATA

NAME OF SECTION	WEST CELL DOCK
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
15	
16	
17	
18	
19	
20	
21	
22	
23	
24	
25	
26	
27	
28	
29	
30	
31	
32	
33	
34	
35	
36	
37	
38	
39	
40	
41	
42	
43	
44	
45	
46	
47	
48	
49	
50	
51	
52	
53	
54	
55	
56	
57	
58	
59	
60	
61	
62	
63	
64	
65	
66	
67	
68	
69	
70	
71	
72	
73	
74	
75	
76	
77	
78	
79	
80	
81	
82	
83	
84	
85	
86	
87	
88	
89	
90	
91	
92	
93	
94	
95	
96	
97	
98	
99	
100	

DATE OF OBSERVATION 6/28/85

VESSEL NAME NANTICOKE

DIRECTION	UPBOUND
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

VESSEL LENGTH in foot = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in foot = 18

VESSEL SPEED in foot/sec. = 14.31

BOW ON TIME in sec = 36

STERN ON TIME in sec = 87

DISTANCE TO STAFF GAUGE from green side in feet = 40

BACKGROUND READING in inches = 19

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	19.0	0.0
2	13.0	20.5	1.5
3	24.0	19.5	0.5
4	30.0	19.0	0.0
5	40.0	18.0	-1.0
6	45.0	17.0	-2.0
7	50.0	16.0	-3.0
8	53.0	15.5	-3.5
9	56.0	15.0	-4.0
10	59.0	14.0	-5.0
11	62.0	13.0	-6.0
12	66.0	12.0	-7.0
13	68.0	11.0	-8.0
14	76.0	9.0	-10.0
15	78.0	9.0	-10.0
16	81.0	8.0	-11.0
17	91.0	7.0	-12.0
18	96.0	8.0	-11.0
19	97.0	9.0	-10.0
20	98.0	10.0	-9.0

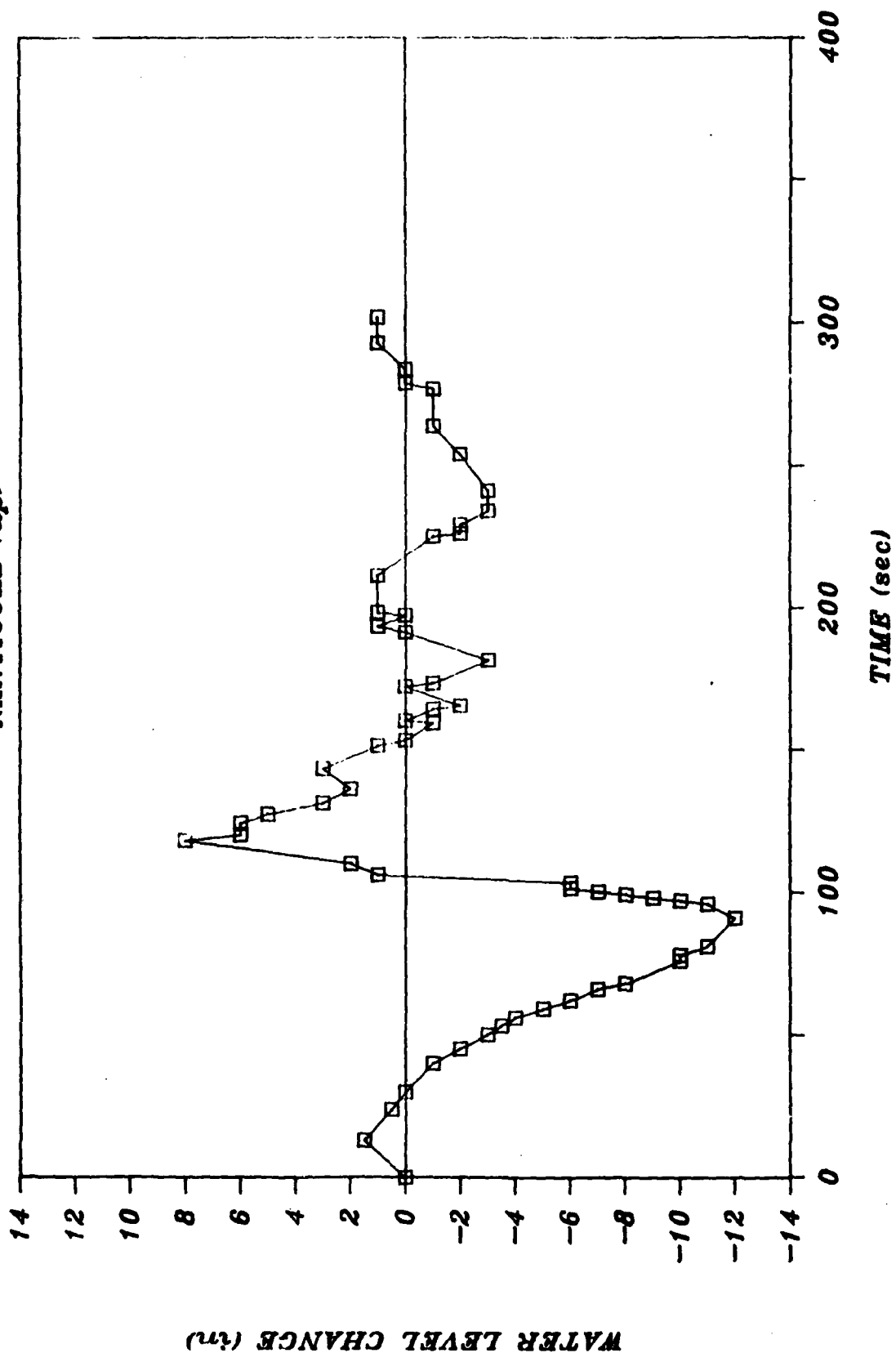
DRAWDOWN DATA (continued)

NAME OF SECTION WEST CELL DOCK

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	99.0	11.0	-8.0
22	100.0	12.0	-7.0
23	101.0	13.0	-6.0
24	103.0	13.0	-6.0
25	106.0	20.0	1.0
26	110.0	21.0	2.0
27	118.0	27.0	8.0
28	120.0	25.0	6.0
29	124.0	25.0	6.0
30	127.0	24.0	5.0
31	131.0	22.0	3.0
32	136.0	21.0	2.0
33	143.0	22.0	3.0
34	151.0	20.0	1.0
35	153.0	19.0	0.0
36	159.0	18.0	-1.0
37	160.0	19.0	0.0
38	164.0	18.0	-1.0
39	165.0	17.0	-2.0
40	172.0	19.0	0.0
41	173.0	18.0	-1.0
42	181.0	16.0	-3.0
43	191.0	19.0	0.0
44	193.0	20.0	1.0
45	197.0	19.0	0.0
46	198.0	20.0	1.0
47	211.0	20.0	1.0
48	225.0	18.0	-1.0
49	226.0	17.0	-2.0
50	241.0	16.0	-3.0
51	254.0	17.0	-2.0
52	264.0	18.0	-1.0
53	277.0	18.0	-1.0
54	279.0	19.0	0.0
55	284.0	19.0	0.0
56	293.0	20.0	1.0
57	302.0	20.0	1.0

WEST CELL DOCK (green)

NANTICOKE (wp)



DRAWDOWN DATA

NAME OF SECTION WEST CELL DOCK

DATE OF OBSERVATION 6/28/85

VESSEL NAME

DIRECTION NANTICOKE/UPBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 18

VESSEL SPEED in feet/sec. = 14.31

BOW ON TIME in sec = 36

STERN ON TIME in sec = 87

DISTANCE TO STAFF GAUGE from green side in feet = 1395

BACKGROUND READING in inches = 30

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	30.0	0.0
2	23.0	29.0	-1.0
3	33.0	28.0	-2.0
4	40.0	27.0	-3.0
5	41.0	26.0	-4.0
6	43.0	25.0	-5.0
7	45.0	24.0	-6.0
8	50.0	23.0	-7.0
9	51.0	22.0	-8.0
10	55.0	21.0	-9.0
11	56.0	20.0	-10.0
12	60.0	20.0	-10.0
13	65.0	21.0	-9.0
14	72.0	21.0	-9.0
15	79.0	22.0	-8.0
16	84.0	23.0	-7.0
17	86.0	24.0	-6.0
18	93.0	25.0	-5.0
19	94.0	26.0	-4.0
20	99.0	27.0	-3.0

oo

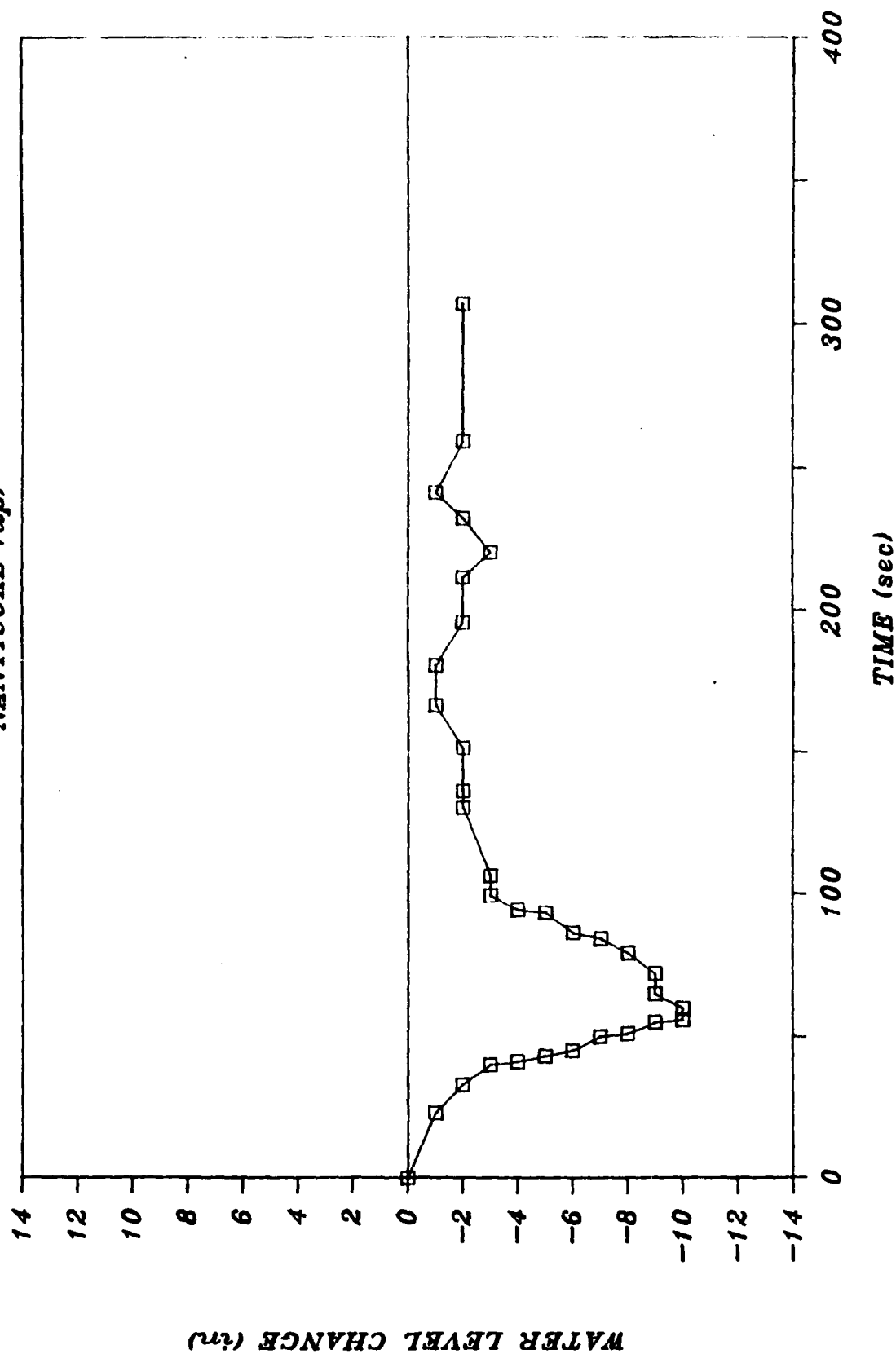
DRAWDOWN DATA (continued)

NAME OF SECTION WEST CELL DOCK

oo

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	106.0	27.0	-3.0
22	130.0	28.0	-2.0
23	136.0	28.0	-2.0
24	151.0	28.0	-2.0
25	166.0	29.0	-1.0
26	180.0	29.0	-1.0
27	195.0	29.0	-1.0
28	211.0	28.0	-2.0
29	220.0	27.0	-3.0
30	232.0	28.0	-2.0
31	241.0	29.0	-1.0
32	259.0	28.0	-2.0
33	307.0	28.0	-2.0

WEST CELL DOCK (red) NANTICOKE (wp)



MOON ISLAND

 DRAWDOWN DATA

NAME OF SECTION MOON ISLAND

DATE OF OBSERVATION 5/15/85

VESSEL NAME EDGAR B. SPEAR

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 1004

VESSEL BEAM in feet = 105

VESSEL DRAFT in feet = 27

VESSEL SPEED in feet/sec. = 10.87

BOW ON TIME in sec = 85

STERN ON TIME in sec = 177

DISTANCE TO STAFF GAUGE from green side in feet = 1660

BACKGROUND READING in inches = 19

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	19.0	0.0
2	5.0	19.0	0.0
3	11.0	20.0	1.0
4	18.0	21.0	2.0
5	32.0	21.0	2.0
6	39.0	22.0	3.0
7	47.0	21.0	2.0
8	52.0	20.0	1.0
9	70.0	20.0	1.0
10	85.0	21.0	2.0
11	90.0	19.0	0.0
12	95.0	19.0	0.0
13	101.0	18.0	-1.0
14	107.0	18.0	-1.0
15	109.0	17.0	-2.0
16	112.0	16.0	-3.0
17	116.0	16.0	-3.0
18	120.0	14.0	-5.0
19	129.0	12.0	-7.0
20	130.0	11.0	-8.0

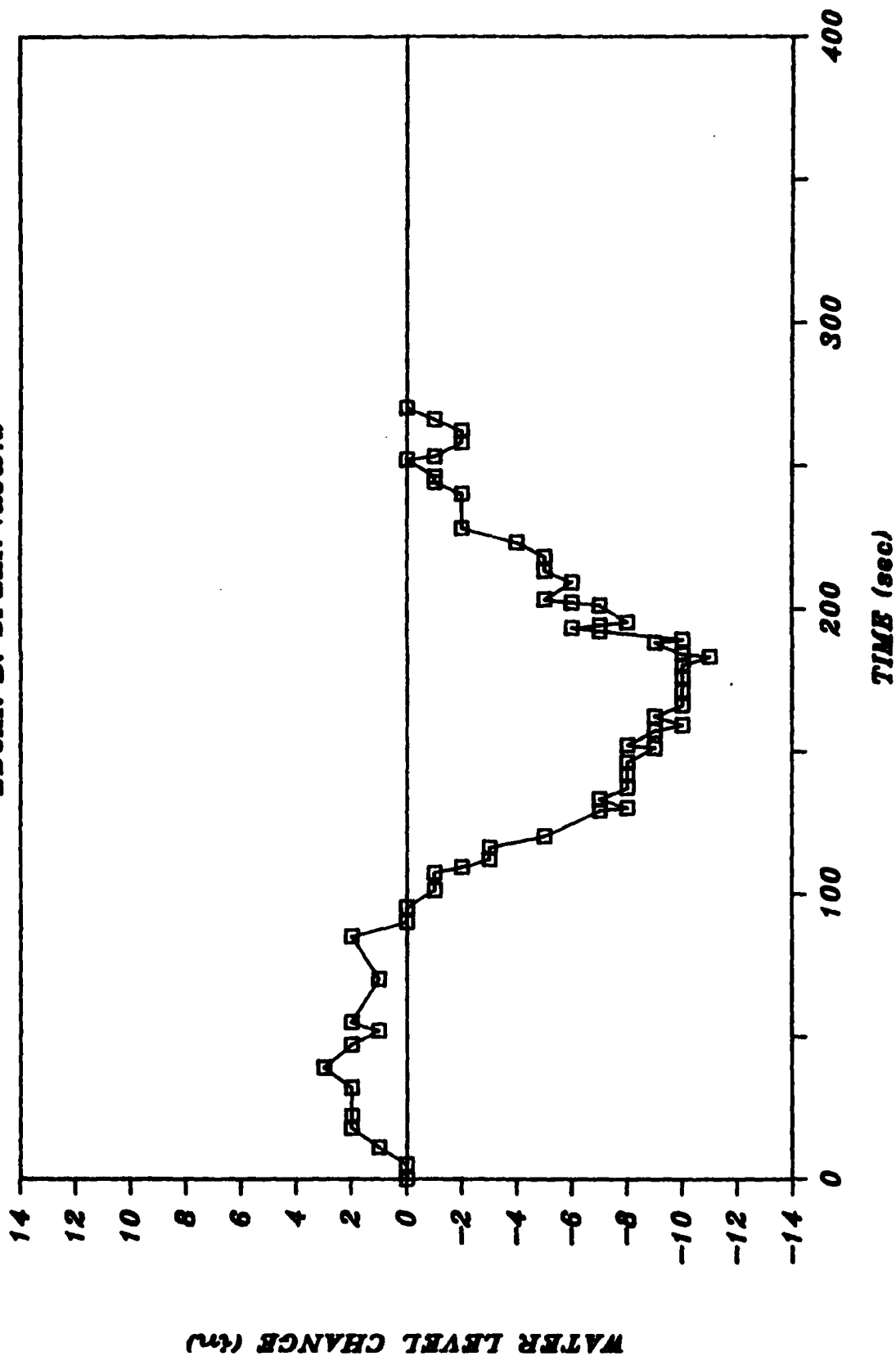
DRAWDOWN DATA (continued)

NAME OF SECTION MOON ISLAND

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	133.0	12.0	-7.0
22	137.0	11.0	-8.0
23	148.0	11.0	-8.0
24	151.0	10.0	-9.0
25	152.0	11.0	-8.0
26	157.0	10.0	-9.0
27	159.0	9.0	-10.0
28	162.0	10.0	-9.0
29	166.0	9.0	-10.0
30	183.0	8.0	-11.0
31	184.0	9.0	-10.0
32	188.0	10.0	-9.0
33	189.0	9.0	-10.0
34	192.0	12.0	-7.0
35	193.0	13.0	-6.0
36	194.0	12.0	-7.0
37	195.0	11.0	-8.0
38	201.0	12.0	-7.0
39	202.0	13.0	-6.0
40	203.0	14.0	-5.0
41	218.0	14.0	-5.0
42	223.0	15.0	-4.0
43	228.0	17.0	-2.0
44	240.0	17.0	-2.0
45	246.0	18.0	-1.0
46	252.0	18.0	-1.0
47	253.0	19.0	0.0
48	258.0	18.0	-1.0
49	262.0	17.0	-2.0
50	266.0	18.0	-1.0
51	270.0	19.0	0.0

MOON ISLAND

EDGAR B. SPEAR (down)



DRAWDOWN DATA

NAME OF SECTION	MOON ISLAND
1. NAME OF SECTION	
2. NAME OF SECTION	
3. NAME OF SECTION	
4. NAME OF SECTION	
5. NAME OF SECTION	
6. NAME OF SECTION	
7. NAME OF SECTION	
8. NAME OF SECTION	
9. NAME OF SECTION	
10. NAME OF SECTION	
11. NAME OF SECTION	
12. NAME OF SECTION	
13. NAME OF SECTION	
14. NAME OF SECTION	
15. NAME OF SECTION	
16. NAME OF SECTION	
17. NAME OF SECTION	
18. NAME OF SECTION	
19. NAME OF SECTION	
20. NAME OF SECTION	
21. NAME OF SECTION	
22. NAME OF SECTION	
23. NAME OF SECTION	
24. NAME OF SECTION	
25. NAME OF SECTION	
26. NAME OF SECTION	
27. NAME OF SECTION	
28. NAME OF SECTION	
29. NAME OF SECTION	
30. NAME OF SECTION	
31. NAME OF SECTION	
32. NAME OF SECTION	
33. NAME OF SECTION	
34. NAME OF SECTION	
35. NAME OF SECTION	
36. NAME OF SECTION	
37. NAME OF SECTION	
38. NAME OF SECTION	
39. NAME OF SECTION	
40. NAME OF SECTION	
41. NAME OF SECTION	
42. NAME OF SECTION	
43. NAME OF SECTION	
44. NAME OF SECTION	
45. NAME OF SECTION	
46. NAME OF SECTION	
47. NAME OF SECTION	
48. NAME OF SECTION	
49. NAME OF SECTION	
50. NAME OF SECTION	
51. NAME OF SECTION	
52. NAME OF SECTION	
53. NAME OF SECTION	
54. NAME OF SECTION	
55. NAME OF SECTION	
56. NAME OF SECTION	
57. NAME OF SECTION	
58. NAME OF SECTION	
59. NAME OF SECTION	
60. NAME OF SECTION	
61. NAME OF SECTION	
62. NAME OF SECTION	
63. NAME OF SECTION	
64. NAME OF SECTION	
65. NAME OF SECTION	
66. NAME OF SECTION	
67. NAME OF SECTION	
68. NAME OF SECTION	
69. NAME OF SECTION	
70. NAME OF SECTION	
71. NAME OF SECTION	
72. NAME OF SECTION	
73. NAME OF SECTION	
74. NAME OF SECTION	
75. NAME OF SECTION	
76. NAME OF SECTION	
77. NAME OF SECTION	
78. NAME OF SECTION	
79. NAME OF SECTION	
80. NAME OF SECTION	
81. NAME OF SECTION	
82. NAME OF SECTION	
83. NAME OF SECTION	
84. NAME OF SECTION	
85. NAME OF SECTION	
86. NAME OF SECTION	
87. NAME OF SECTION	
88. NAME OF SECTION	
89. NAME OF SECTION	
90. NAME OF SECTION	
91. NAME OF SECTION	
92. NAME OF SECTION	
93. NAME OF SECTION	
94. NAME OF SECTION	
95. NAME OF SECTION	
96. NAME OF SECTION	
97. NAME OF SECTION	
98. NAME OF SECTION	
99. NAME OF SECTION	
100. NAME OF SECTION	

DATE OF OBSERVATION 5/15/85

VESSEL NAME **AMERICAN MARINER**

DIRECTION	DOWNBOUND
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
38	38
39	39
40	40
41	41
42	42
43	43
44	44
45	45
46	46
47	47
48	48
49	49
50	50
51	51
52	52
53	53
54	54
55	55
56	56
57	57
58	58
59	59
60	60
61	61
62	62
63	63
64	64
65	65
66	66
67	67
68	68
69	69
70	70
71	71
72	72
73	73
74	74
75	75
76	76
77	77
78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

VESSEL LENGTH in feet = 728

VESSEL BEAM in feet = 78

VESSEL DRAFT in foot = 28

VESSEL SPEED in feet/sec. = 11.2

BOW ON TIME in sec = 85

STERN ON TIME in sec = 150

DISTANCE TO STAFF GAUGE from green side in feet = 1660

BACKGROUND READING in inches = 18

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	18.0	0.0
2	36.0	18.0	0.0
3	38.0	19.0	1.0
4	60.0	19.0	1.0
5	70.0	18.0	0.0
6	75.0	18.0	0.0
7	90.0	17.0	-1.0
8	98.0	16.0	-2.0
9	107.0	15.0	-3.0
10	116.0	14.0	-4.0
11	116.0	18.0	0.0
12	119.0	13.0	-5.0
13	124.0	13.0	-5.0
14	125.0	17.0	-1.0
15	129.0	12.0	-6.0
16	130.0	18.0	0.0
17	132.0	11.0	-7.0
18	137.0	11.0	-7.0
19	139.0	10.0	-8.0
20	141.0	10.0	-8.0

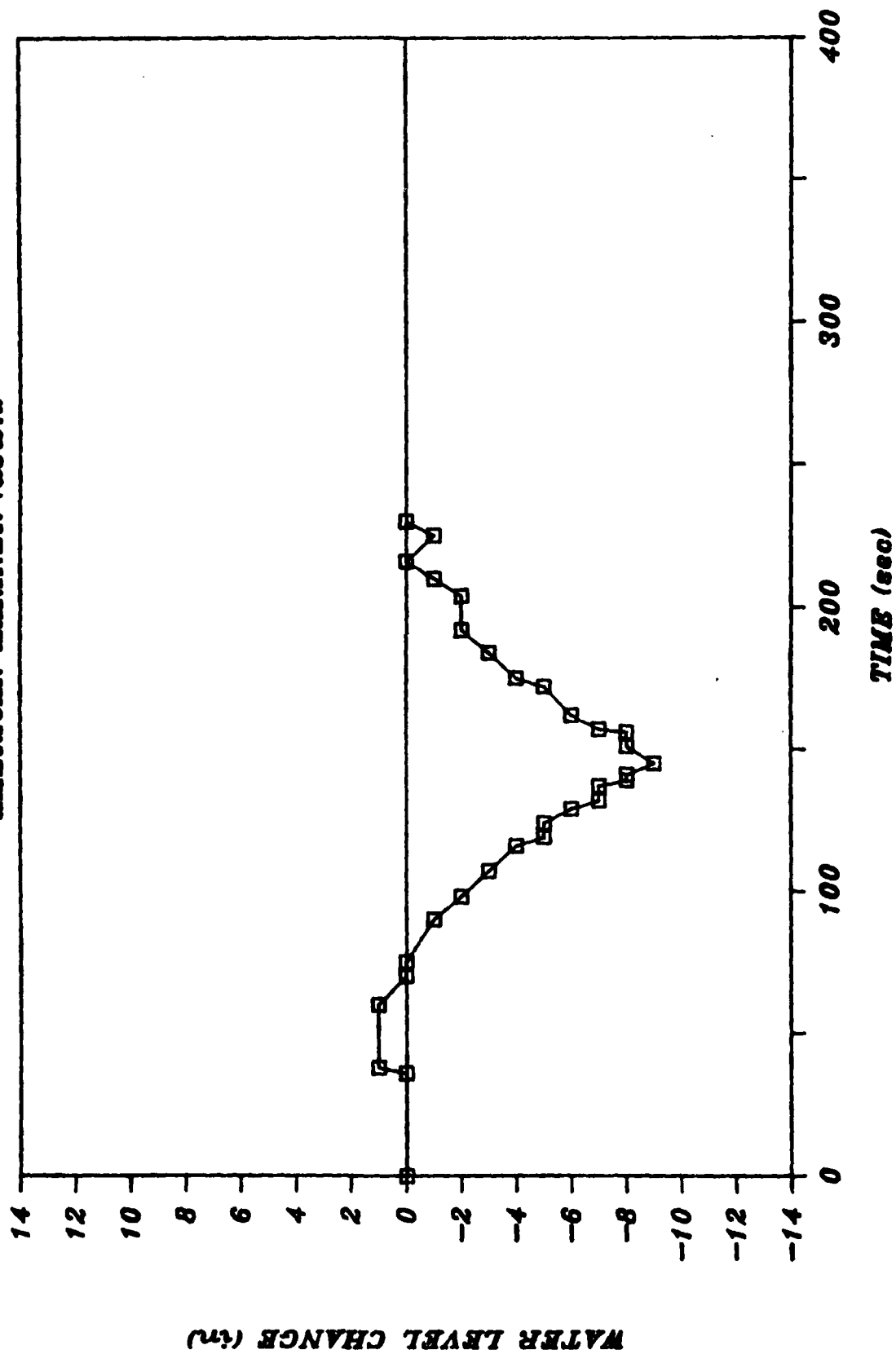
DRAWDOWN DATA (continued)

NAME OF SECTION MOON ISLAND

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	145.0	9.0	-9.0
22	151.0	10.0	-8.0
23	156.0	10.0	-8.0
24	157.0	11.0	-7.0
25	162.0	12.0	-6.0
26	170.0	13.0	-5.0
27	175.0	14.0	-4.0
28	184.0	15.0	-3.0
29	192.0	16.0	-2.0
30	204.0	16.0	-2.0
31	210.0	17.0	-1.0

MOON ISLAND

AMERICAN MARINER (down)



DRAWDOWN DATA

NAME OF SECTION MOON ISLAND

DATE OF OBSERVATION **5/15/85**

VESSEL NAME RICHELEU

DIRECTION DOWNBOUND

VESSEL LENGTH in foot = 730

VESSEL BEAN in foot = 75

VESSEL DRAFT in feet = 26

VESSEL SPEED in foot/sec. = 11.97

BOW ON TIME in sec = 75

STERN ON TIME in sec = 136

DISTANCE TO STAFF GAUGE from green side in feet = 1660

BACKGROUND READING in inches = 18

DATA POINT	TIME(sec)	GUAGE READING(in)	CHANGE FROM BG(in)
1	0.0	18.0	0.0
2	9.0	18.0	0.0
3	31.0	19.0	1.0
4	35.0	19.0	1.0
5	41.0	20.0	2.0
6	52.0	20.0	2.0
7	66.0	19.0	1.0
8	81.0	18.0	0.0
9	86.0	17.0	-1.0
10	90.0	16.0	-2.0
11	99.0	15.0	-3.0
12	101.0	15.0	-3.0
13	106.0	14.0	-4.0
14	113.0	13.0	-5.0
15	118.0	12.0	-6.0
16	126.0	12.0	-6.0
17	129.0	11.0	-7.0
18	136.0	10.0	-8.0
19	141.0	10.0	-8.0
20	147.0	11.0	-7.0

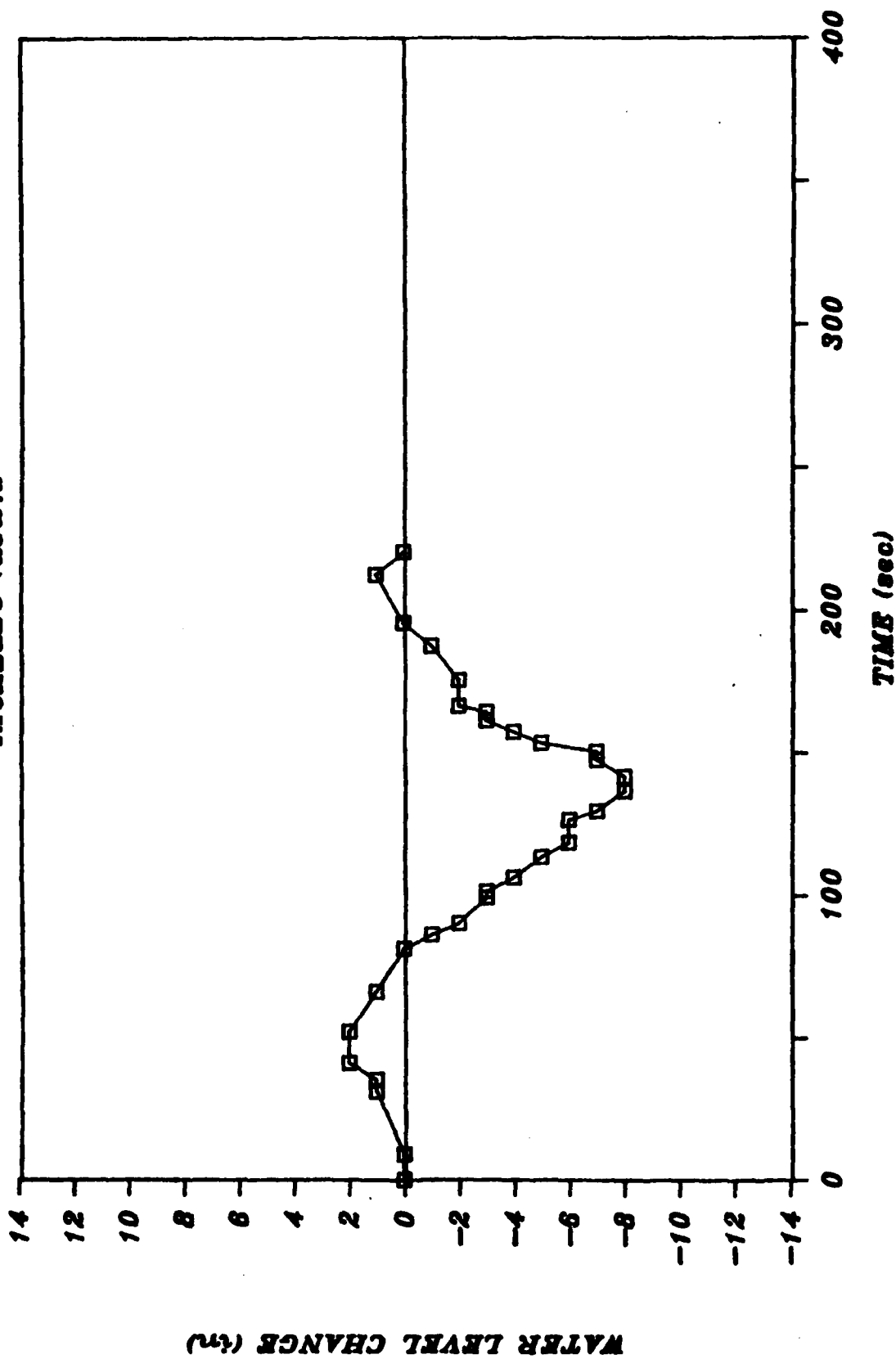
DRAWDOWN DATA (continued)

NAME OF SECTION MOON ISLAND

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	150.0	11.0	-7.0
22	153.0	13.0	-5.0
23	157.0	14.0	-4.0
24	161.0	15.0	-3.0
25	164.0	15.0	-3.0
26	166.0	16.0	-2.0
27	175.0	16.0	-2.0
28	187.0	17.0	-1.0
29	195.0	18.0	0.0
30	212.0	19.0	1.0
31	220.0	18.0	0.0

MOON ISLAND

RICHIELEU (down)



DRAWDOWN DATA

NAME OF SECTION NOON ISLAND

VESSEL NAME **WILLOW GLEN**

VESSEL LENGTH in foot = 621

VESSEL DRAFT in foot = 22

BOW ON TIME in sec = 67

DISTANCE TO STAFF GAUGE from green side in feet = 1660

BACKGROUND READING in inches = 19

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	19.0	0.0
2	31.0	19.0	0.0
3	39.0	20.0	1.0
4	60.0	20.0	1.0
5	80.0	18.0	-1.0
6	90.0	17.0	-2.0
7	101.0	16.0	-3.0
8	103.0	15.0	-4.0
9	105.0	15.0	-4.0
10	108.0	14.0	-5.0
11	117.0	13.0	-6.0
12	127.0	13.0	-6.0
13	131.0	14.0	-5.0
14	133.0	15.0	-4.0
15	137.0	16.0	-3.0
16	142.0	16.0	-3.0
17	143.0	17.0	-2.0
18	162.0	17.0	-2.0
19	176.0	17.0	-2.0
20	182.0	18.0	-1.0

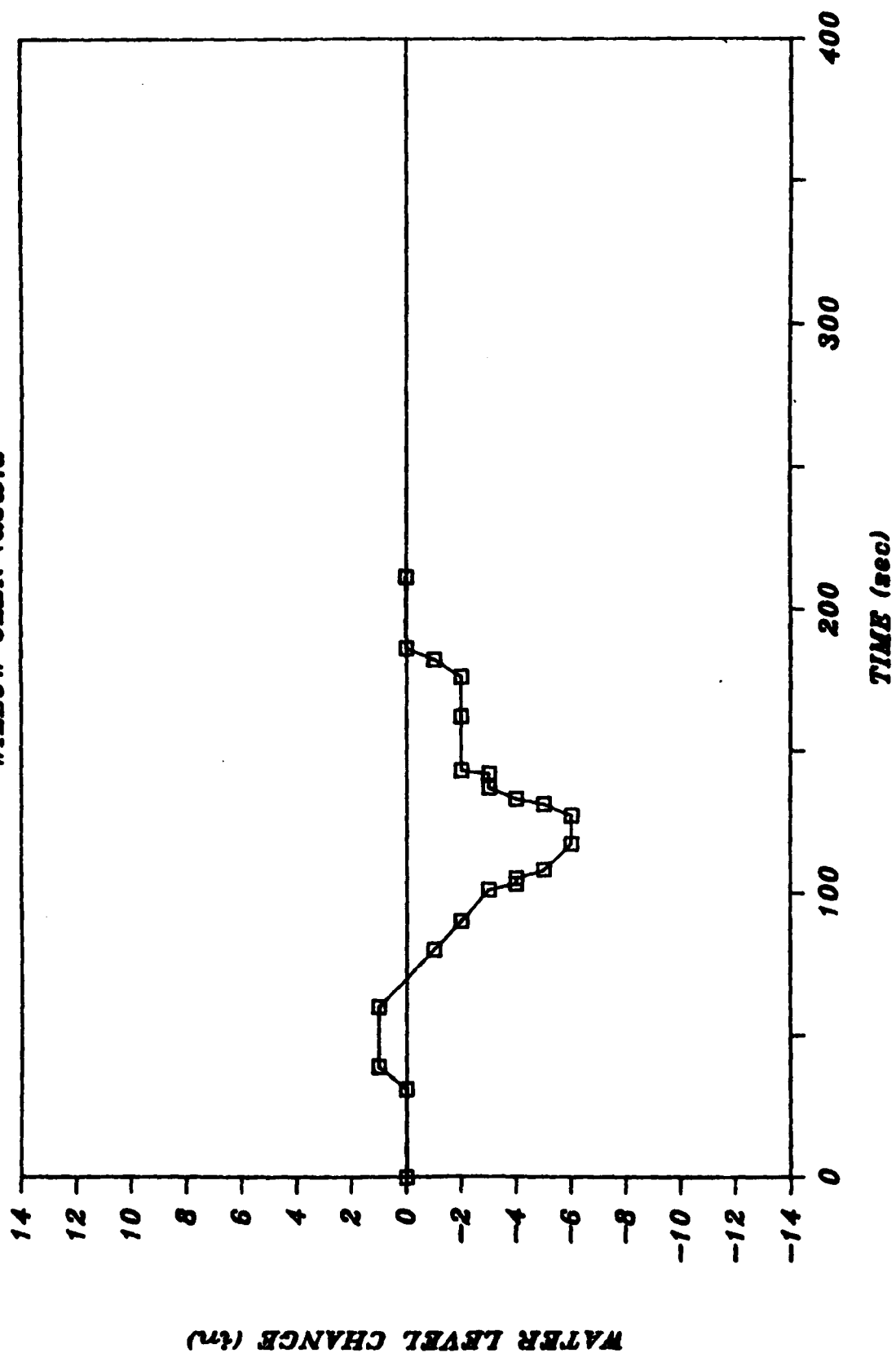
DRAWDOWN DATA (continued)

NAME OF SECTION MOON ISLAND

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	186.0	19.0	0.0
22	211.0	19.0	0.0

MOON ISLAND

WILLOW GLEN (down)



DRAWDOWN DATA

NAME OF SECTION MOON ISLAND

VESSEL NAME BLACK BAY

VESSEL LENGTH in foot = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in foot = 25.5

VESSEL SPEED in foot/sec. = 12.6

BOW ON TIME in sec = 63

STERN ON TIME in sec = 121

DISTANCE TO STAFF GAUGE from green side in feet = 1660

BACKGROUND READING in inches = 19

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	19.0	0.0
2	10.0	20.0	1.0
3	20.0	20.0	1.0
4	24.0	21.0	2.0
5	39.0	21.0	2.0
6	42.0	22.0	3.0
7	47.0	22.0	3.0
8	63.0	21.0	2.0
9	72.0	20.0	1.0
10	77.0	20.0	1.0
11	80.0	19.0	0.0
12	84.0	18.0	-1.0
13	88.0	17.0	-2.0
14	91.0	16.0	-3.0
15	97.0	15.0	-4.0
16	101.0	15.0	-4.0
17	105.0	14.0	-5.0
18	108.0	14.0	-5.0
19	110.0	13.0	-6.0
20	113.0	13.0	-6.0

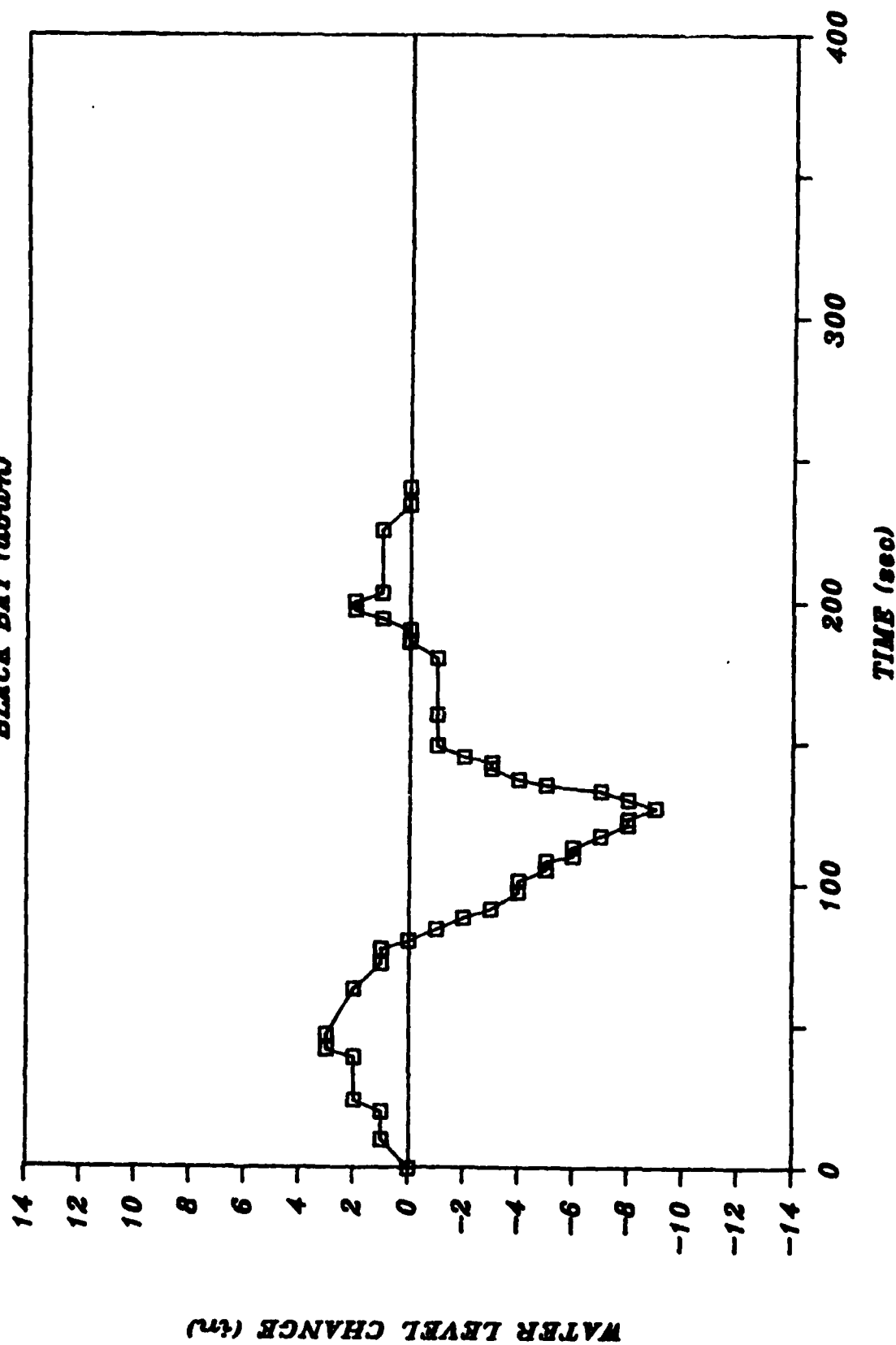
DRAWDOWN DATA (continued)

NAME OF SECTION MOON ISLAND

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	117.0	12.0	-7.0
22	121.0	11.0	-8.0
23	123.0	11.0	-8.0
24	127.0	10.0	-9.0
25	130.0	11.0	-8.0
26	133.0	12.0	-7.0
27	135.0	14.0	-5.0
28	137.0	15.0	-4.0
29	141.0	16.0	-3.0
30	143.0	16.0	-3.0
31	145.0	17.0	-2.0
32	149.0	18.0	-1.0
33	160.0	18.0	-1.0
34	180.0	18.0	-1.0
35	186.0	19.0	0.0
36	190.0	19.0	0.0
37	194.0	20.0	1.0
38	197.0	21.0	2.0
39	200.0	21.0	2.0
40	203.0	20.0	1.0
41	225.0	20.0	1.0
42	234.0	19.0	0.0
43	240.0	19.0	0.0

MOON ISLAND

BLACK BAY (down)



DRAWDOWN DATA

NAME OF SECTION MOON ISLAND

DATE OF OBSERVATION 5/16/85

VESSEL NAME BELLE RIVER

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 1000

VESSEL BEAM in feet = 105

VESSEL DRAFT in feet = 26.5

VESSEL SPEED in feet/sec. = 10.64

BOW ON TIME in sec = 78

STERN ON TIME in sec = 172

DISTANCE TO STAFF GAUGE from green side in feet = 1660

BACKGROUND READING in inches = 20

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	20.0	0.0
2	5.0	20.0	0.0
3	31.0	21.0	1.0
4	38.0	22.0	2.0
5	54.0	22.0	2.0
6	61.0	21.0	1.0
7	78.0	21.0	1.0
8	85.0	20.0	0.0
9	94.0	19.0	-1.0
10	99.0	19.0	-1.0
11	102.0	18.0	-2.0
12	104.0	17.0	-3.0
13	108.0	17.0	-3.0
14	110.0	16.0	-4.0
15	115.0	15.0	-5.0
16	119.0	15.0	-5.0
17	121.0	14.0	-6.0
18	124.0	14.0	-6.0
19	125.0	13.0	-7.0
20	135.0	13.0	-7.0

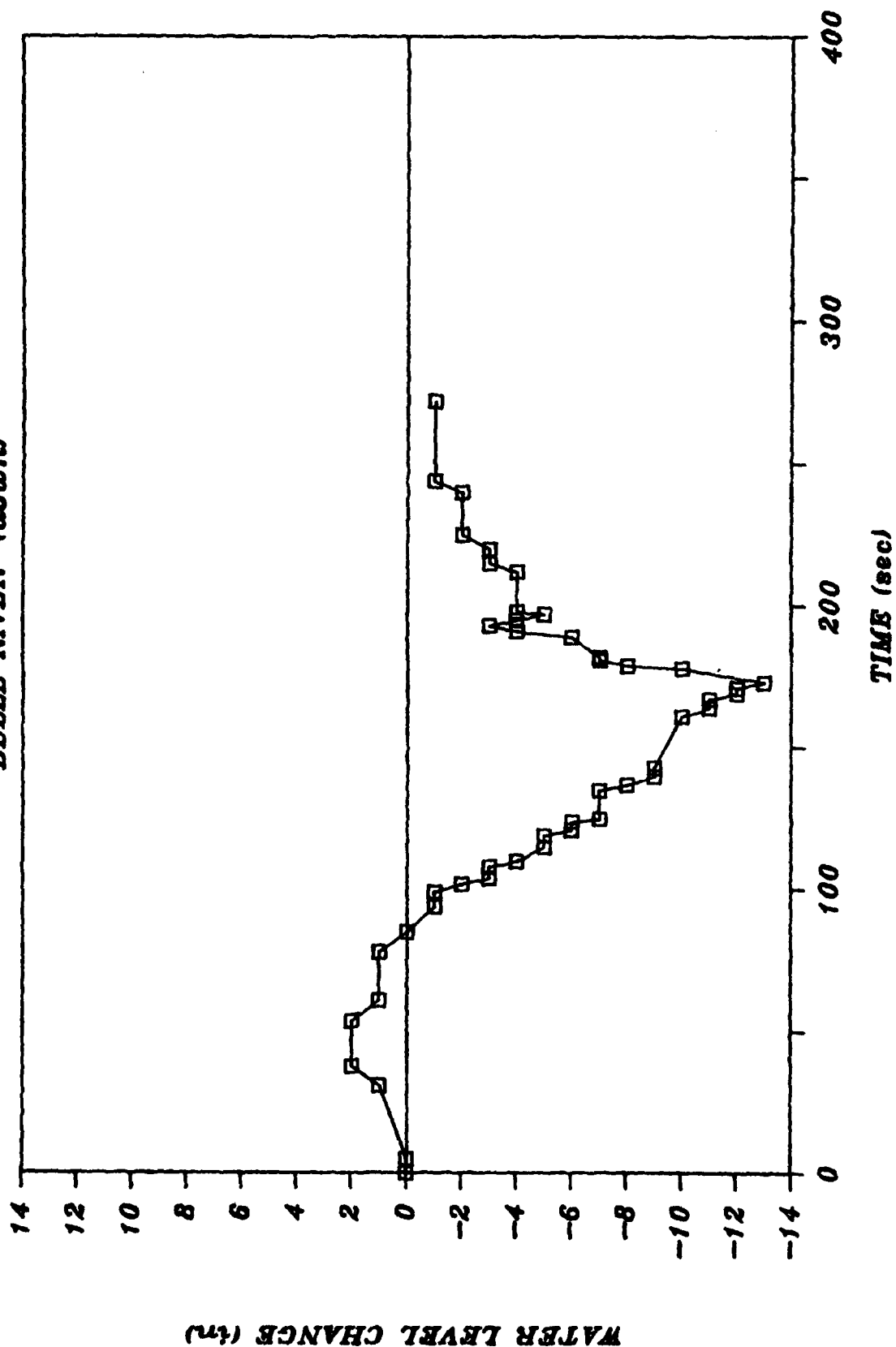
DRAWDOWN DATA (continued)

NAME OF SECTION MOON ISLAND

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	137.0	12.0	-8.0
22	140.0	11.0	-9.0
23	143.0	11.0	-9.0
24	161.0	10.0	-10.0
25	164.0	9.0	-11.0
26	167.0	9.0	-11.0
27	169.0	8.0	-12.0
28	171.0	8.0	-12.0
29	173.0	7.0	-13.0
30	178.0	10.0	-10.0
31	179.0	12.0	-8.0
32	180.0	13.0	-7.0
33	182.0	13.0	-7.0
34	189.0	14.0	-6.0
35	191.0	16.0	-4.0
36	193.0	17.0	-3.0
37	195.0	16.0	-4.0
38	197.0	15.0	-5.0
39	198.0	16.0	-4.0
40	212.0	16.0	-4.0
41	215.0	17.0	-3.0
42	220.0	17.0	-3.0
43	225.0	18.0	-2.0
44	240.0	18.0	-2.0
45	244.0	19.0	-1.0

MOON ISLAND

BELLE RIVER (down)



BG18

DRAWDOWN DATA

NAME OF SECTION	MOON ISLAND
1. NAME OF SECTION	MOON ISLAND

DATE OF OBSERVATION 5/17/85

VESSEL NAME **CANADIAN PIONEER**

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 730

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 25.6

VESSEL SPEED in feet/sec. = 12.8

BOW ON TIME in sec = 77

STERN ON TIME in sec = 134

DISTANCE TO STAFF GAUGE from green side in feet = 1660

BACKGROUND READING in inches = 17

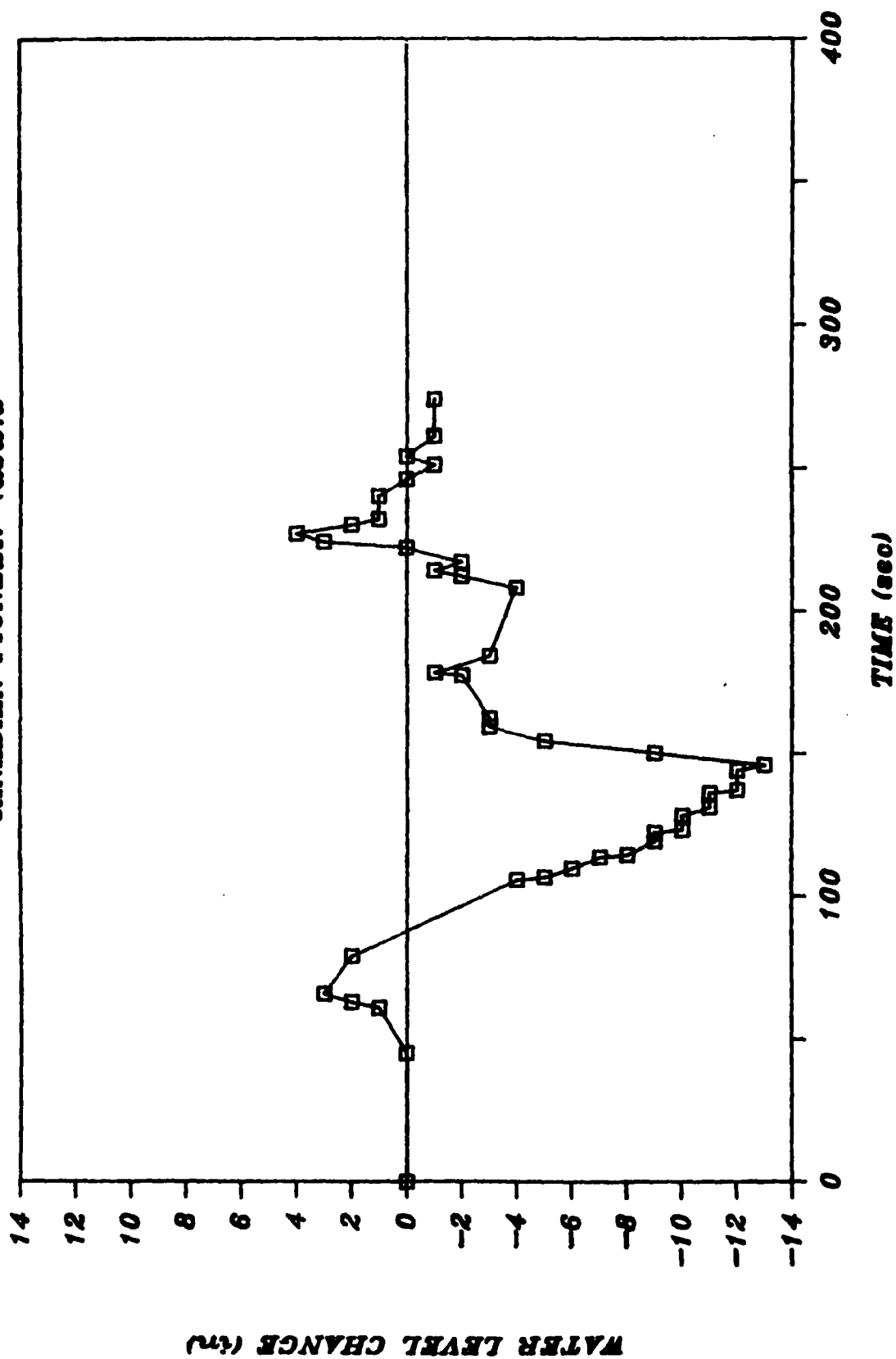
DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	17.0	0.0
2	45.0	17.0	0.0
3	61.0	18.0	1.0
4	63.0	19.0	2.0
5	66.0	20.0	3.0
6	79.0	19.0	2.0
7	105.0	13.0	-4.0
8	106.0	12.0	-5.0
9	109.0	11.0	-6.0
10	113.0	10.0	-7.0
11	114.0	9.0	-8.0
12	119.0	8.0	-9.0
13	122.0	8.0	-9.0
14	123.0	7.0	-10.0
15	128.0	7.0	-10.0
16	131.0	6.0	-11.0
17	136.0	6.0	-11.0
18	137.0	5.0	-12.0
19	144.0	5.0	-12.0
20	146.0	4.0	-13.0

DRAWDOWN DATA (continued)

NAME OF SECTION MOON ISLAND

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	150.0	8.0	-9.0
22	154.0	12.0	-5.0
23	159.0	14.0	-3.0
24	162.0	14.0	-3.0
25	177.0	15.0	-2.0
26	178.0	16.0	-1.0
27	184.0	14.0	-3.0
28	208.0	13.0	-4.0
29	212.0	15.0	-2.0
30	214.0	16.0	-1.0
31	217.0	15.0	-2.0
32	222.0	17.0	0.0
33	224.0	20.0	3.0
34	227.0	21.0	4.0
35	230.0	19.0	2.0
36	232.0	18.0	1.0
37	240.0	18.0	1.0
38	246.0	17.0	0.0
39	251.0	16.0	-1.0
40	254.0	17.0	0.0
41	261.0	16.0	-1.0
42	274.0	16.0	-1.0

MOON ISLAND CANADIAN PIONEER (down)



DRAWDOWN DATA

NAME OF SECTION MOON ISLAND

DATE OF OBSERVATION 5/17/85

VESSEL NAME PRAIRIE HARVEST

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 736.5

VESSEL BEAM in feet = 75

VESSEL DRAFT in feet = 26

VESSEL SPEED in feet/sec. = 13.15

BOW ON TIME in sec = 77

STERN ON TIME in sec = 133

DISTANCE TO STAFF GAUGE from green side in feet = 1660

BACKGROUND READING in inches = 19

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	19.0	0.0
2	28.0	19.0	0.0
3	30.0	20.0	1.0
4	39.0	20.0	1.0
5	48.0	21.0	2.0
6	77.0	22.0	3.0
7	90.0	20.0	1.0
8	92.0	19.0	0.0
9	100.0	17.0	-2.0
10	101.0	16.0	-3.0
11	105.0	14.0	-5.0
12	108.0	13.0	-6.0
13	112.0	12.0	-7.0
14	117.0	10.0	-9.0
15	118.0	9.0	-10.0
16	123.0	7.0	-12.0
17	126.0	6.0	-13.0
18	129.0	6.0	-13.0
19	130.0	5.0	-14.0
20	132.0	5.0	-14.0

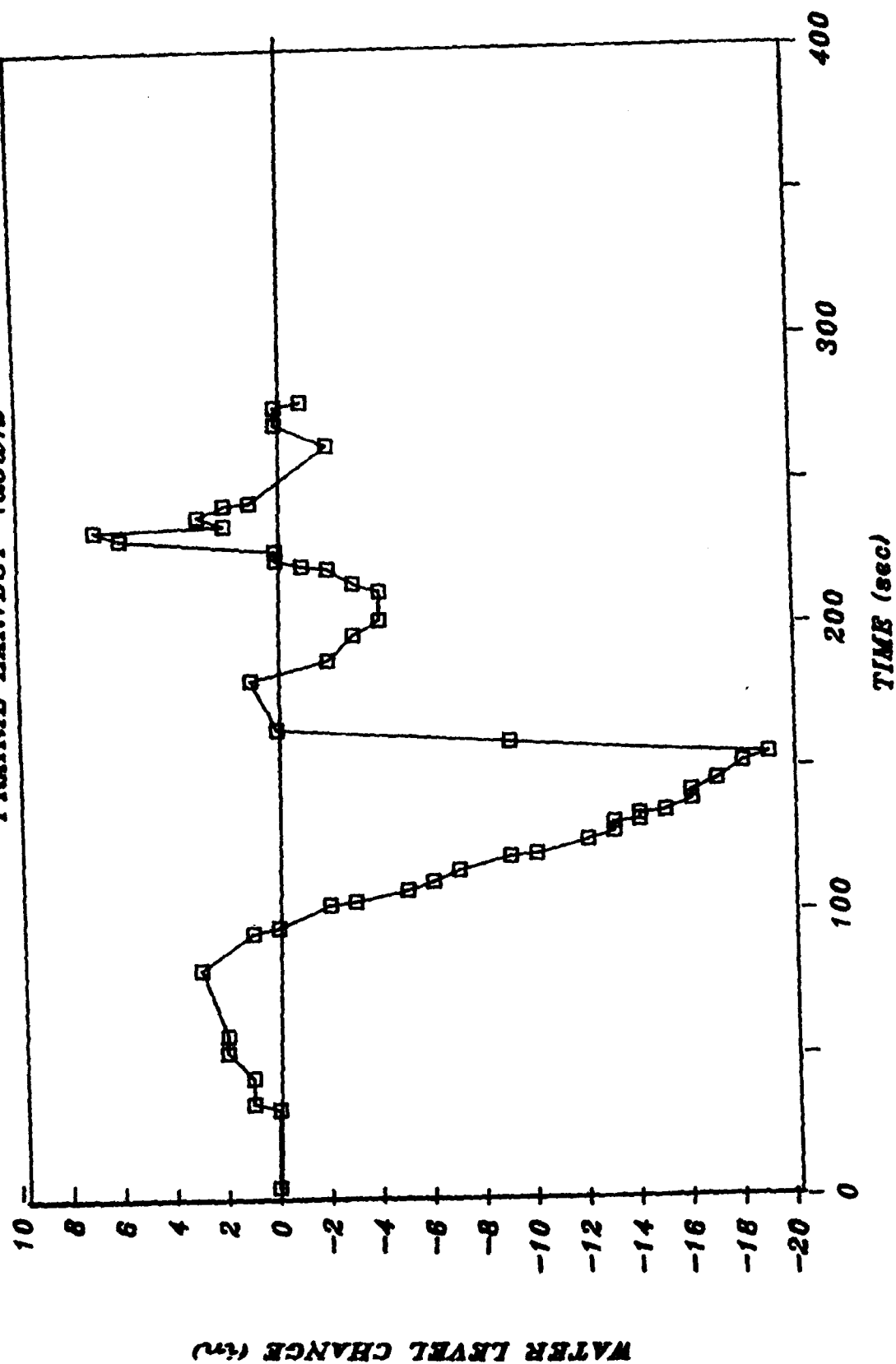
DRAWDOWN DATA (continued)

NAME OF SECTION MOON ISLAND

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	133.0	4.0	-15.0
22	137.0	3.0	-16.0
23	140.0	3.0	-16.0
24	144.0	2.0	-17.0
25	150.0	1.0	-18.0
26	153.0	0.0	-19.0
27	157.0	10.0	-9.0
28	161.0	19.0	0.0
29	178.0	20.0	1.0
30	185.0	17.0	-2.0
31	194.0	16.0	-3.0
32	199.0	15.0	-4.0
33	209.0	15.0	-4.0
34	212.0	16.0	-3.0
35	217.0	17.0	-2.0
36	218.0	18.0	-1.0
37	220.0	19.0	0.0
38	223.0	19.0	0.0
39	227.0	25.0	6.0
40	230.0	26.0	7.0
41	232.0	21.0	2.0
42	235.0	22.0	3.0
43	239.0	21.0	2.0
44	240.0	20.0	1.0
45	260.0	17.0	-2.0
46	267.0	19.0	0.0
47	273.0	19.0	0.0
48	275.0	18.0	-1.0

MOON ISLAND

PRAIRIE HARVEST (down)



DRAWDOWN DATA

NAME OF SECTION MOON ISLAND

DATE OF OBSERVATION 5/18/85

VESSEL NAME PHILIP R. CLARKE

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 767

VESSEL BEAM in feet = 70

VESSEL DRAFT in feet = 27

VESSEL SPEED in feet/sec. = 13.22

BOW ON TIME in sec = 87

STERN ON TIME in sec = 145

DISTANCE TO STAFF GAUGE from green side in feet = 1660

BACKGROUND READING in inches = 18

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	18.0	0.0
2	37.0	18.0	0.0
3	46.0	19.0	1.0
4	54.0	19.0	1.0
5	56.0	20.0	2.0
6	67.0	20.0	2.0
7	76.0	21.0	3.0
8	91.0	20.0	2.0
9	95.0	19.0	1.0
10	105.0	17.0	-1.0
11	111.0	16.0	-2.0
12	112.0	15.0	-3.0
13	115.0	14.0	-4.0
14	120.0	13.0	-5.0
15	123.0	12.0	-6.0
16	127.0	11.0	-7.0
17	133.0	10.0	-8.0
18	136.0	10.0	-8.0
19	140.0	9.0	-9.0
20	146.0	9.0	-9.0

oo

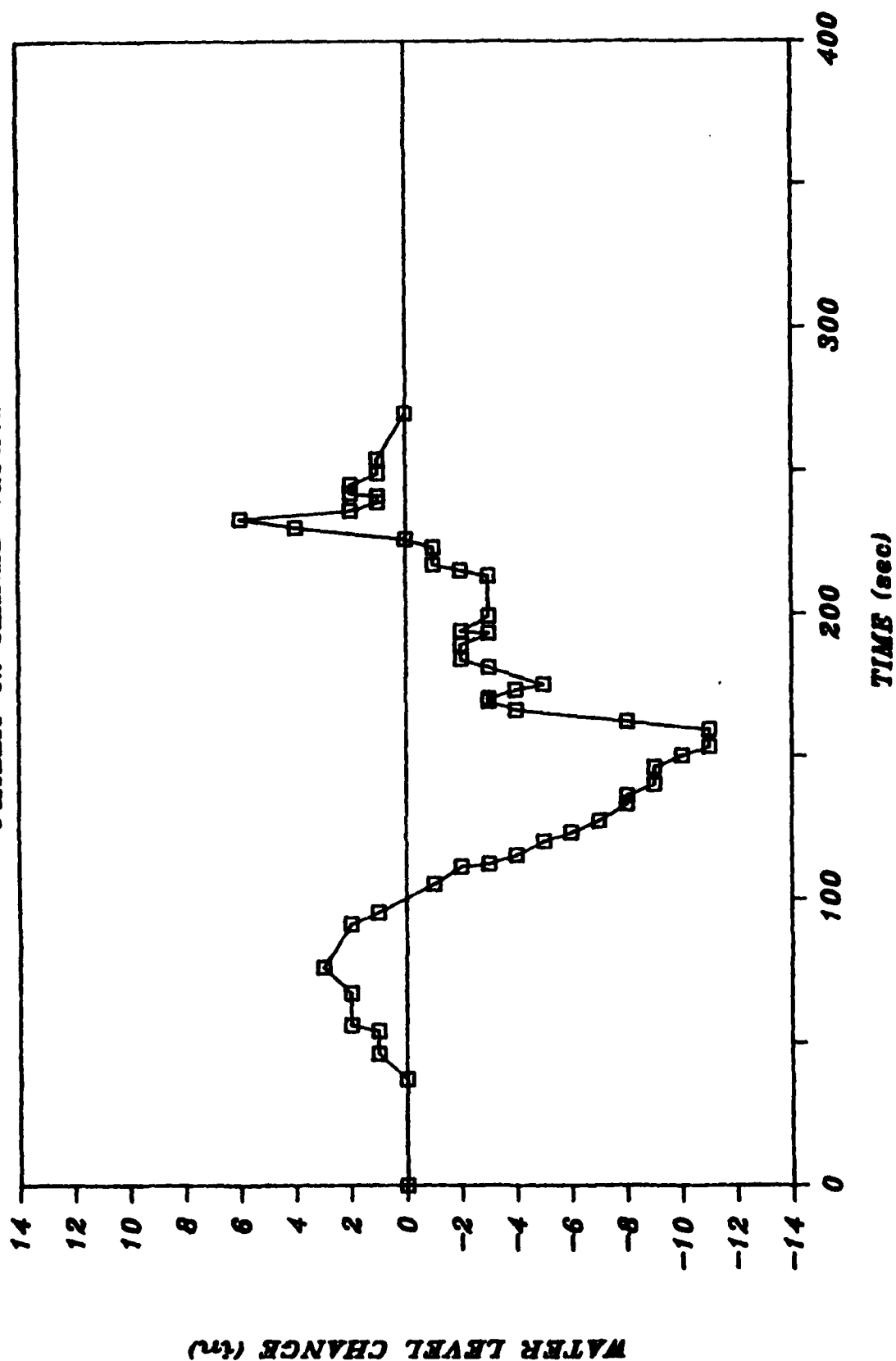
DRAWDOWN DATA (continued)

NAME OF SECTION MOON ISLAND

oo

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	150.0	8.0	-10.0
22	153.0	7.0	-11.0
23	159.0	7.0	-11.0
24	162.0	10.0	-8.0
25	166.0	14.0	-4.0
26	169.0	15.0	-3.0
27	170.0	15.0	-3.0
28	173.0	14.0	-4.0
29	175.0	13.0	-5.0
30	181.0	15.0	-3.0
31	184.0	16.0	-2.0
32	189.0	16.0	-2.0
33	193.0	15.0	-3.0
34	194.0	16.0	-2.0
35	199.0	15.0	-3.0
36	213.0	15.0	-3.0
37	215.0	16.0	-2.0
38	217.0	17.0	-1.0
39	223.0	17.0	-1.0
40	226.0	18.0	0.0
41	230.0	22.0	4.0
42	233.0	24.0	6.0
43	236.0	20.0	2.0
44	239.0	19.0	1.0
45	241.0	19.0	1.0
46	242.0	20.0	2.0
47	245.0	20.0	2.0
48	249.0	19.0	1.0
49	254.0	19.0	1.0
50	270.0	18.0	0.0

MOON ISLAND (red)
PHILLIP R. CLARKE (down)



DRAWDOWN DATA

000

BACKGROUND READING in inches = 15

BG28

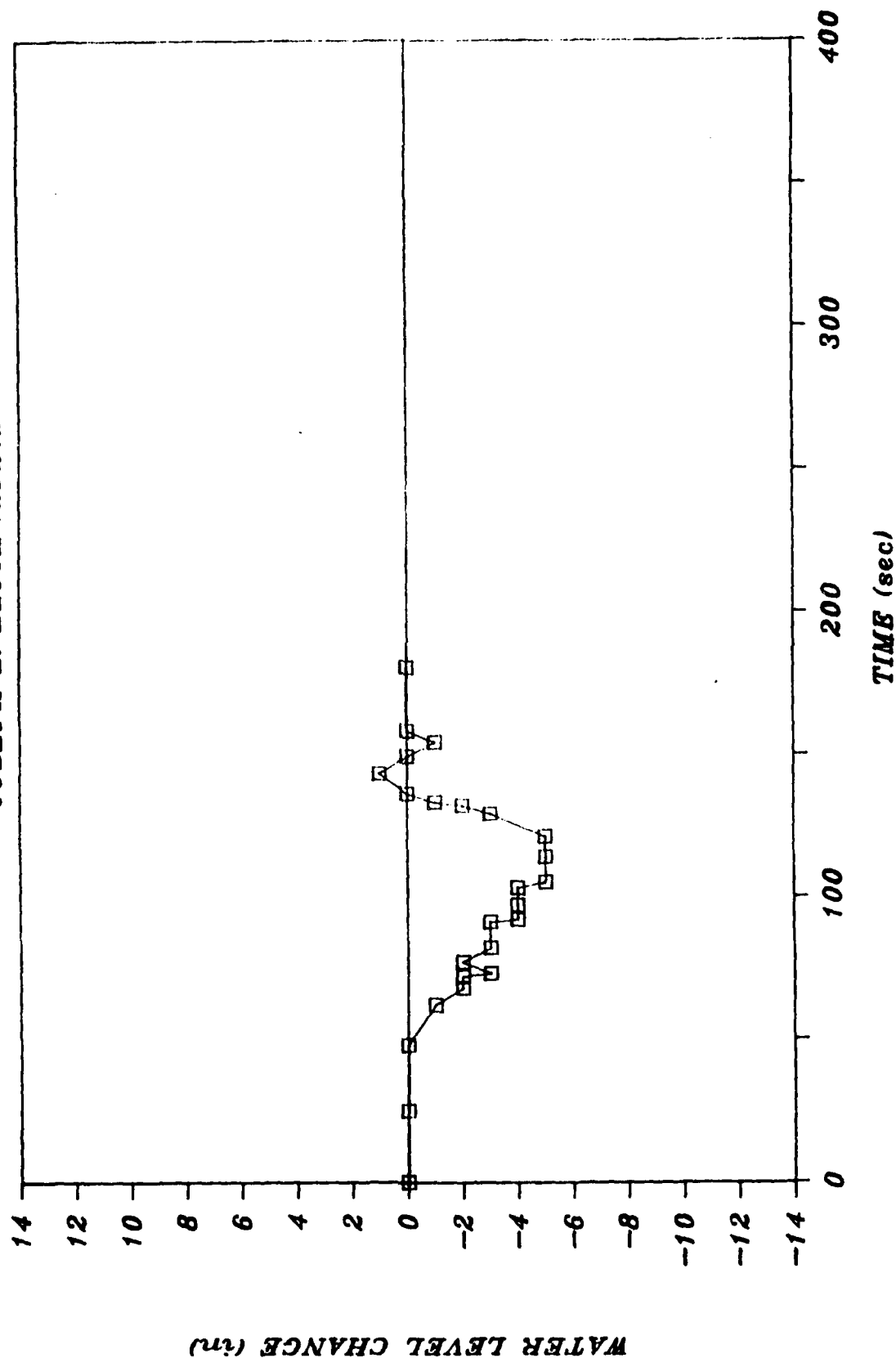
DRAWDOWN DATA (continued)

NAME OF SECTION MOON ISLAND

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
21	143.0	16.0	1.0
22	149.0	15.0	0.0
23	154.0	14.0	-1.0
24	158.0	15.0	0.0
25	180.0	15.0	0.0

MOON ISLAND (green)

JOSEPH L. BLOCK (down)



 DRAWDOWN DATA

NAME OF SECTION MOON ISLAND

DATE OF OBSERVATION 6/27/85

VESSEL NAME JOSEPH L. BLOCK

DIRECTION DOWNBOUND

VESSEL LENGTH in feet = 728

VESSEL BEAM in feet = 78

VESSEL DRAFT in feet = 28

VESSEL SPEED in feet/sec. = 10.4

BOW ON TIME in sec = 56

STERN ON TIME in sec = 126

DISTANCE TO STAFF GAUGE from green side in feet = 1660

BACKGROUND READING in inches = 25

DATA POINT	TIME(sec)	GAUGE READING(in)	CHANGE FROM BG(in)
1	0.0	25.0	0.0
2	59.0	25.0	0.0
3	67.0	24.0	-1.0
4	76.0	23.0	-2.0
5	82.0	22.0	-3.0
6	88.0	21.0	-4.0
7	95.0	20.0	-5.0
8	104.0	19.0	-6.0
9	115.0	19.0	-6.0
10	125.0	19.0	-6.0
11	132.0	20.0	-5.0
12	138.0	21.0	-4.0
13	143.0	22.0	-3.0
14	150.0	22.0	-3.0
15	153.0	23.0	-2.0
16	159.0	24.0	-1.0
17	166.0	24.0	-1.0
18	174.0	25.0	0.0
19	191.0	25.0	0.0
20	301.0	25.0	0.0

MOON ISLAND (red)

JOSEPH L. BLOCK (down)

